

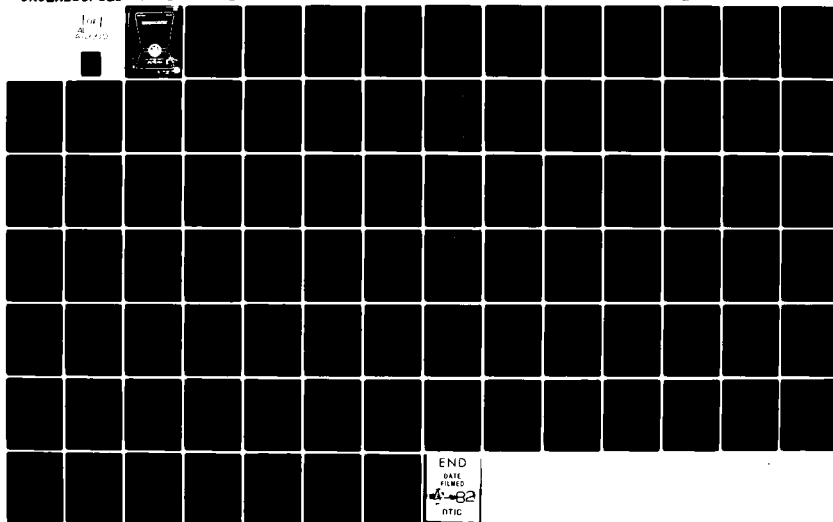
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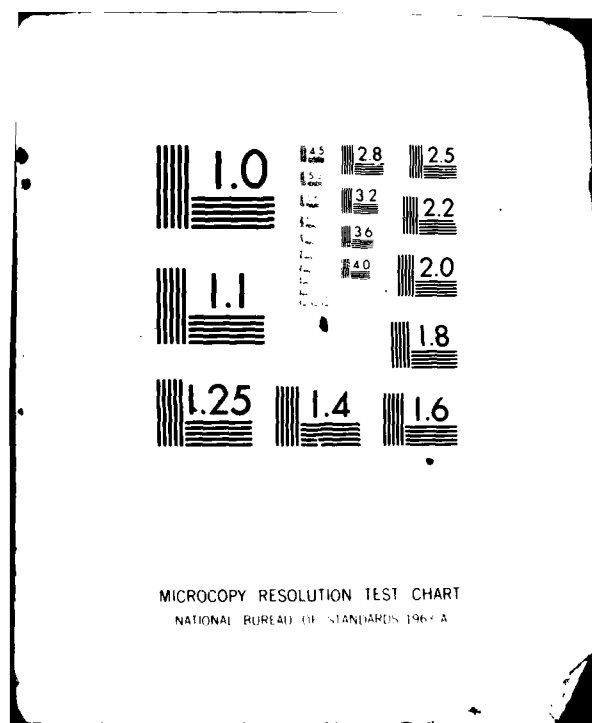
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March 1982

**MANPOWER AVAILABILITY PROJECTIONS FOR
SELECTED CONSTRAINED FOR RATINGS--FY81-87**

E. A. Koehler

Reviewed by
R. E. Blanchard

Released by
James F. Kelly, Jr.
Commanding Officer

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San Diego, California 92152

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Personnel in their second enlistment, who comprise the bulk of the Navy's experienced personnel pool, are in seriously short supply for many ratings. As a result, many Navy systems are being manned and maintained by personnel with skills and experience below that necessary for optimum performance. This report identifies selected Navy enlisted ratings having a 20 percent or greater shortfall for any year (1981-1987). Manpower availability data were developed using		

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manpower requirements forecasting and availability projections developed and maintained by the Chief of Naval Operations. The data base used is predicted on the growth to a 600-ship Navy by FY 1989. ←

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FOREWORD

This effort has been conducted under project 63564N (surface ship continuing concept formulation), and the sponsorship of the Commander, Naval Sea Systems Command (SEA-313). The objective of the project is to identify future whole ship design alternatives that satisfy future mission requirements. The project is intended to provide guidance for research and development (R&D) priorities based on assessment of future whole ship impact of projected technology advances.

The objective of the effort presented herein is to provide decision makers in hardware development and manpower planning offices with information regarding current and projected availability of manpower for pay grades within selected Navy ratings through FY1987. This information is intended to assist these decision makers in estimating the demand for personnel of particular ratings and pay grades and in determining the probability of whether personnel with those qualifications will be available to meet the demands of new hardware acquisitions. If this information is utilized early in the design process, hardware developers and the associated R&D community will be able to focus on and compensate for specific manning problem areas through research and hardware design actions. This report, which is the third on manpower availability, supersedes the previous issue, NPRDC Special Report 80-5 of December 1979.

Appreciation is expressed to personnel of the CNO Enlisted Programs Implementation Branch (OP-135), especially to LT Paul G. Johnson, for assistance in acquiring the manpower forecast data.

JAMES F. KELLY, JR.
Commanding Officer

JAMES J. REGAN
Technical Director

SUMMARY

Problem

Personnel in their second enlistment, which comprise the bulk of the Navy's experienced personnel pool, are in seriously short supply for many ratings. As a result, many of the Navy's systems are being manned and maintained by personnel with skills and experience far below that required for optimum system performance.

Objective

The objective of this effort was to identify those Navy ratings and pay grades in seriously short supply. This knowledge will enable hardware developers, the research and development (R&D) community, and manpower planners to focus on specific manning and skill level problem areas and to compensate for such deficiencies through design, research, and planning actions.

Approach

Manpower availability data were developed using manpower requirements forecasting and availability projections developed and maintained by the Chief of Naval Operations (OP-11 and OP-13). The data base used is that predicated upon the growth to a 600-ship Navy by FY 1989.

Results and Conclusions

Projections through fiscal year 1987 indicate that skill shortages, especially in pay grades E-5 and E-6 (second and first class petty officers), will continue to impact the Navy. The hardware development community can assist in reducing the impact of these shortages by actively seeking to develop systems that can be operated and maintained by fewer and less skilled military personnel.



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INTRODUCTION

Problem

Navy ships and systems are manned by a wide variety of enlisted personnel of different ratings (occupations) and rates (skill levels). Training individuals for these different positions requires substantial time, instructor personnel and facilities, and financial investment.

While the Navy has been reasonably successful in recruiting first-term enlistees, retaining these personnel beyond their initial enlistment has continued to be a problem. Second-term enlistees, which are the primary input into the Navy's experienced personnel pool, are in very short supply for many ratings, especially in pay grades E-5 and E-6 (second and first class petty officers). As a result, many Navy systems are being manned and maintained by personnel with skills and experience below that required for optimum system performance.

Purpose

The purpose of this effort was to identify those Navy ratings and pay grades in severely short supply. This knowledge will enable hardware developers to consider the impact of manpower limitations during the concept formulation and subsequent stages of system development.

This report, which is the third on manpower availability, supersedes the previous issue, NPRDC Special Report 80-5 of December 1979.¹

APPROACH

Data Sources

Projected enlisted manpower availability data through fiscal year 1987 were obtained from the Chief of Naval Operations (OP-135). These data were generated by the Force Structure Projection Computer Model (known as FAST), which was developed by the Navy Personnel Research and Development Center and implemented in the OP-01 organization. The FAST model simulates the flow of active duty enlisted personnel through the Navy force structure, using such historical data as number of enlistments, promotion flow, and attrition rates. The model also is used to project the implications of proposed changes in various manpower policy aspects such as pay, enlistment periods, training, and other benefits upon the future manpower pool. In this way, it is able to project the size and composition (rating and pay grade) of the enlisted force that will be available in future years.

Projected enlisted requirements data through fiscal year 1987 were also obtained from the Chief of Naval Operations (OP-135) and are based on the Navy's total manning requirements. Requirements are projected using information contained in ship and shore manning documents, planned ship and hardware system acquisitions and losses, and

¹Koehler, E. A., & Miller, M. A. Manpower Availability--Navy Enlisted Projections--FY79-FY85 (NPRDC SR 80-5). San Diego: Navy Personnel Research and Development Center, December 1979.

historical sources. Requirements data presented in this report were established by the Navy and reflect manning levels needed to fully meet the operational and support needs of the service. This differs from authorization, which is based upon a manpower ceiling imposed by Congress. Authorization reflects the constraints of budget limitations imposed on each service and other factors that may be imposed to limit the size and composition of the force.

Procedure

This report includes only those selected technical Navy ratings that are experiencing a shortfall of 20 percent or more within any pay grade from E-4 through E-7 for any year from FY81 through FY87. Within this constraint, requirements and available manning data are presented for the following 32 ratings:

1. AC--Air Traffic Controller
2. AX--Aviation Antisubmarine Warfare Technician
3. ABE--Aviation Boatswain's Mate (Launching & Recovery Equipment)
4. AQ--Aviation Fire Control Technician
5. AME--Aviation Structural Mechanic (Safety Equipment)
6. BT--Boiler Technician
7. CTI--Cryptologic Technician (Interpretive Branch)
8. CTM--Cryptologic Technician (Maintenance Branch)
9. CTT--Cryptologic Technician (Technical Branch)
10. DS--Data Systems Technician
11. EM--Electrician's Mate
12. EW--Electronics Warfare Technician
13. FTG--Fire Control Technician (Gun Fire Control)
14. FTM--Fire Control Technician (Surface Missile Fire Control)
15. GSE--Gas Turbine System Technician (Electrical)
16. GSM--Gas Turbine System Technician (Mechanical)
17. GMG--Gunner's Mate (Guns)
18. GMM--Gunner's Mate (Missiles)
19. GMT--Gunner's Mate (Technician)
20. HT--Hull Maintenance Technician

21. IM--Instrumentman
22. IC--Interior Communications Electrician
23. IS--Intelligence Specialist
24. MR--Machinery Repairman
25. MM--Machinist's Mate
26. OT--Ocean Systems Technician
27. OS--Operations Specialist
28. OM--Opticalman
29. QM--Quartermaster
30. STG--Sonar Technician (Surface)
31. STS--Sonar Technician (Submarine)
32. TM--Torpedoman's Mate

RESULTS

Manpower availability data for the 32 selected ratings are tabled in the appendix. These tables present, for fiscal years 1981 through 1987, combined data for pay grades E-1 through E-3 (strikers); separate data for pay grades E-4 through E-9; combined data for pay grades E-4 through E-9; and, finally, combined data for pay grades E-1 through E-9. Data within the cells for each pay grade represent:

1. The number of personnel projected to be in that pay grade at the end of the fiscal year.
2. The average length of service (LOS) of those personnel.
3. CNO estimates of the number of personnel required in that pay grade at the end of the fiscal year.
4. The difference between projected and required personnel, expressed as a percentage.

Each table is accompanied by a graph, which presents manpower availability data for personnel in the E-4, E-5, E-6, and E-7 pay grades. These four pay grades are comprised of personnel who are most likely to be involved in the actual operation and/or maintenance of shipboard systems. These graphs indicate, for each of these pay grades:

1. The number of personnel who will be available at the end of fiscal years 1981 through 1987.
2. The number of personnel needed to meet the CNO requirement estimates.

3. The difference (surplus or shortfall) between available and required personnel. These graphs have all been prepared to the same scale to allow comparisons of surpluses or shortfalls of the different ratings. The vertical scale (number of personnel) has been cut at various points to permit a single page presentation for each rating. However, the HT, MM, and OS ratings are the exception; their graphs required two or three pages due to the size of the populations presented.

Table 1 is a summary of manpower availability data for the 32 selected ratings expressed as a percentage above or below requirements. These data indicate that, during the next 6 years, there will be substantial shortages of skilled personnel for particular ratings and pay grades. For example, during FY82, shortages are expected to occur in many ratings at the E-5 level. At the E-6 and E-7 levels, all reported ratings will experience shortages.

CONCLUSIONS AND RECOMMENDATIONS

The hardware development community can help to reduce the impact of the projected shortages of skilled personnel in the middle pay grades by developing hardware systems that can be operated and maintained by lesser skilled personnel in the lower pay grades. In doing this, the hardware designer should consider design options or procedures that would either simplify task performance or reduce the number of skilled personnel required.

NAVPERSRANDCEN published an engineer's guide to assist in meeting this challenge.² Later in 1982, an updated and expanded design guide will be published. A copy of either guide can be obtained by contacting Mr. Ernest Koehler, NAVPERSRANDCEN, Code 17, telephone (714) 225-6617 or Autovon 933-6617.

²An engineer's guide to the use of human resources in electronic systems design (NPRDC TN 79-8). San Diego: Navy Personnel Research and Development Center, June 1979.

Table 1

Manpower Availability Data Expressed as Percent
Above or Below Requirements

Pay Grade	AC	AX	ABE	AQ	AME	BT	CTI	CTM	CTT	DS	EM	EW
FY81												
E-4	-17	+2	+1	-7	+15	+8	-29	-25	-22	+8	+9	0
E-5	-17	-15	+7	-23	-15	-5	-19	-15	-28	+4	-2	+18
E-6	-24	-2	-33	-1	-2	-22	-24	-1	-13	-30	-22	-44
E-7	-6	-6	-19	-6	+17	-6	-6	-7	-7	-7	-6	-6
FY82												
E-4	-19	-2	+14	+3	+15	+15	+1	-14	-28	+15	+15	-2
E-5	-7	-12	-3	-14	-12	-5	-26	-12	-23	0	0	+18
E-6	-18	-2	-21	-9	-2	-17	-18	-2	-10	-24	-22	-43
E-7	-7	-8	-7	-8	-9	-8	-8	-8	-8	-7	-8	-8
FY83												
E-4	-2	-2	+15	+10	-7	+15	+17	-15	-5	+15	+15	+4
E-5	-10	-12	-12	-7	-12	-10	-16	-12	-24	-3	-3	+18
E-6	-11	-1	-1	-15	-1	-9	-13	-1	-15	-19	-18	-44
E-7	-9	-10	-8	-9	-11	-9	-9	-10	-9	-9	-9	-9
FY84												
E-4	+13	-1	+13	+13	-29	+13	+13	-4	+10	+25	+13	+9
E-5	-10	-10	-10	-7	-10	-10	-10	-10	-10	-10	-7	+22
E-6	-5	-5	-5	-14	-5	-5	-8	-5	-9	-9	-14	-46
E-7	-11	-11	-10	-10	-12	-10	-11	-11	-11	-11	-10	-10
FY85												
E-4	+12	-26	+12	+12	-49	+12	+12	-2	+12	+28	+12	+12
E-5	-6	-6	-6	-4	-19	-6	-7	-6	-6	-6	-6	+29
E-6	-4	-4	-4	-14	-4	-4	-4	-4	-4	-4	-11	-47
E-7	-11	-12	-10	-11	-12	-11	-12	-12	-11	-11	-15	-11
FY86												
E-4	+14	-23	+14	+14	-51	+14	+14	+11	+14	+50	+14	+14
E-5	-5	-5	-5	-2	-23	-5	-5	-5	-5	-5	-5	+25
E-6	-4	-4	-4	-15	-4	-4	-4	-4	-4	-4	-10	-42
E-7	-11	-11	-10	-11	-13	-11	-11	-10	-11	-11	-11	-11
FY87												
E-4	+14	-20	+14	+14	-51	+14	+14	+17	+14	+68	+14	+14
E-5	-2	-2	-2	+1	-25	-2	-2	-2	-2	-2	-2	+22
E-6	-5	-5	-5	-16	-5	-5	-5	-5	-5	-5	-8	-36
E-7	-9	-9	-7	-9	-12	-9	-10	-9	-9	-10	-9	-9

Table 1 (Continued)

Pay Grade	FTG	FTM	GSE	GSM	GMG	GMM	GMT	HT	IM	IC	IS
FY81											
E-4	-1	-17	-17	-13	+3	-14	+14	-12	-20	-28	-11
E-5	+27	+23	+52	-28	-15	+6	+9	-6	-48	0	-11
E-6	-51	-47	-50	-58	-1	-67	-40	-34	-21	-29	-13
E-7	-5	-10	-6	-9	-7	-19	-6	-6	-6	-7	-6
FY82											
E-4	+4	-29	-17	+19	+1	-41	+13	-6	-23	-14	-32
E-5	+31	+18	+47	-37	-12	+2	+15	0	-34	0	-10
E-6	-53	-45	-63	-66	-3	-66	-36	-31	-22	-27	-11
E-7	-6	-11	-14	-16	-8	-8	-8	-8	-7	-8	-7
FY83											
E-4	+1	-33	-29	+22	-7	-43	+15	-20	-3	-10	-19
E-5	+35	-4	+24	-30	-12	-10	+8	+6	-25	-1	-14
E-6	-55	-49	-76	-70	-5	-64	-29	-29	-22	-24	-5
E-7	-11	-11	-21	-29	-10	-8	-9	-9	-10	-9	-9
FY84											
E-4	+4	-34	-26	+13	-29	-42	+13	-34	-1	-13	-9
E-5	+34	-12	+55	-5	-10	-15	-5	-1	-11	-5	-10
E-6	-56	-51	-79	-71	-5	-56	-16	-25	-18	-17	-5
E-7	-12	-10	-26	-34	-11	-10	-10	-10	-11	-10	-10
FY85											
E-4	+4	-34	-36	+3	-36	-39	+12	-37	-7	-16	-6
E-5	+39	-13	+60	-4	-9	-16	-6	-13	-6	-6	-6
E-6	-57	-54	-80	-73	-4	-55	-4	-21	-14	-10	-4
E-7	-13	-10	-30	-41	-12	-10	-12	-11	-11	-11	-11
FY86											
E-4	+5	-32	-44	-3	-35	-43	+14	-42	-8	-17	-2
E-5	+37	-7	+79	-2	-9	-19	-5	-17	-5	-5	-5
E-6	-54	-52	-75	-71	-4	-54	-4	-17	-10	-5	-4
E-7	-15	-9	-36	-44	-11	-10	-11	-11	-11	-11	-11
FY87											
E-4	+7	-32	-46	-2	-34	-41	+14	-41	-11	-14	-7
E-5	+37	0	+84	+1	-6	-20	-2	-22	-2	-2	-2
E-6	-49	-51	-70	-66	-5	-54	-5	-13	-6	-5	-5
E-7	-17	-6	-37	-44	-10	-8	-9	-9	-10	-9	-10

Table 1 (Continued)

Pay Grade	MR	MM	OT	OS	OM	QM	STG	STS	TM
FY81									
E-4	-19	-11	-16	-27	-55	-12	+15	+36	-21
E-5	-25	+7	-23	-25	-30	+4	+15	0	-15
E-6	-1	-32	-2	-45	-1	-47	-42	-23	-4
E-7	-7	-6	-7	-6	-5	-6	-7	-6	-6
FY82									
E-4	-1	-1	-17	-34	-49	-24	+2	+15	-16
E-5	-23	+10	-18	-24	-28	+7	+15	+1	-12
E-6	-2	-33	-2	-44	-2	-50	-41	-22	-2
E-7	-8	-8	-8	-8	-8	-8	-8	-8	-8
FY83									
E-4	-19	+9	-10	-19	-34	-36	-20	+15	-4
E-5	-14	+8	-15	-27	-36	+7	+8	+2	-12
E-6	-1	-31	-1	-45	-5	-52	-42	-23	-5
E-7	-10	-9	-9	-9	-10	-9	-9	-9	-9
FY84									
E-4	-30	+13	-11	-5	-45	-41	-24	+13	+10
E-5	-21	+4	-10	-13	-35	+5	-1	-9	-10
E-6	-5	-27	-5	-44	-7	-47	-38	-12	-5
E-7	-11	-10	-11	-10	-10	-10	-10	-10	-10
FY85									
E-4	-42	+12	-25	-16	-36	-42	-27	+12	+12
E-5	-24	+6	-9	-6	-34	0	-6	-6	-6
E-6	-4	-25	-4	-42	-12	-45	-39	-9	-4
E-7	-12	-11	-12	-11	-13	-11	-11	-11	-11
FY86									
E-4	-45	+14	-31	-30	-48	-44	-28	+14	+14
E-5	-20	+5	-6	-5	-26	-2	-6	-5	-5
E-6	-4	-22	-4	-40	-12	-45	-40	-5	-4
E-7	-11	-11	-11	-11	-10	-11	-11	-11	-11
FY87									
E-4	-45	+14	-27	-37	-48	-44	-29	+14	+14
E-5	-20	+5	-2	-10	-31	-2	-5	-2	-2
E-6	-5	-20	-5	-34	-10	-44	-39	-7	-5
E-7	-9	-9	-9	-9	-10	-9	-9	-9	-9

APPENDIX
MANPOWER AVAILABILITY BY RATING AND PAY GRADE

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AIR TRAFFIC CONTROLLER (AC)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	849	972	1058	1206	1439	1694	1719
	1.21	1.16	1.12	1.36	1.57	1.88	2.33
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E-4	631	622	783	902	897	910	914
	2.64	2.55	2.57	2.72	2.96	3.20	3.50
	763	766	800	800	800	800	800
	-17.30	-18.80	-2.12	12.75	12.12	13.75	14.25
E-5	723	853	836	833	872	879	903
	4.97	4.65	4.84	5.11	5.40	5.82	6.30
	870	915	925	925	926	926	926
	-16.90	-6.78	-9.62	-9.95	-5.83	-5.08	-2.48
E-6	515	567	622	661	671	669	665
	10.37	10.41	10.50	11.03	11.60	12.15	12.70
	680	690	695	695	700	700	700
	-24.26	-17.83	-10.50	-4.89	-4.14	-4.43	-5.00
E-7	239	236	236	234	236	236	240
	17.55	17.35	17.11	17.34	17.49	17.25	17.20
	255	255	260	262	265	265	265
	-6.27	-7.45	-9.23	-10.69	-10.94	-10.94	-9.43
E-8	53	54	56	57	57	58	59
	23.22	23.56	23.63	24.24	23.64	23.05	23.26
	62	64	65	67	67	67	67
	-14.52	-15.63	-13.85	-14.93	-14.93	-13.43	-11.94
E-9	20	21	21	23	24	24	24
	25.70	25.64	25.79	25.50	25.54	24.58	24.83
	25	25	25	26	27	27	27
	-20.00	-16.00	-16.00	-11.54	-11.11	-11.11	-11.11
E-4/9	2181	2353	2554	2710	2757	2776	2805
	7.58	7.38	7.24	7.39	7.71	7.98	8.35
	2655	2715	2770	2775	2785	2785	2785
	-17.85	-13.33	-7.80	-2.34	-1.01	-.32	.72
Total	3030	3325	3612	3916	4196	4470	4524
	5.80	5.56	5.45	5.53	5.60	5.67	6.06
	2965	3065	3125	3140	3155	3155	3155
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 723

Means LOS 4.97

Manpower Requirements 870

End Strength Status -16.90

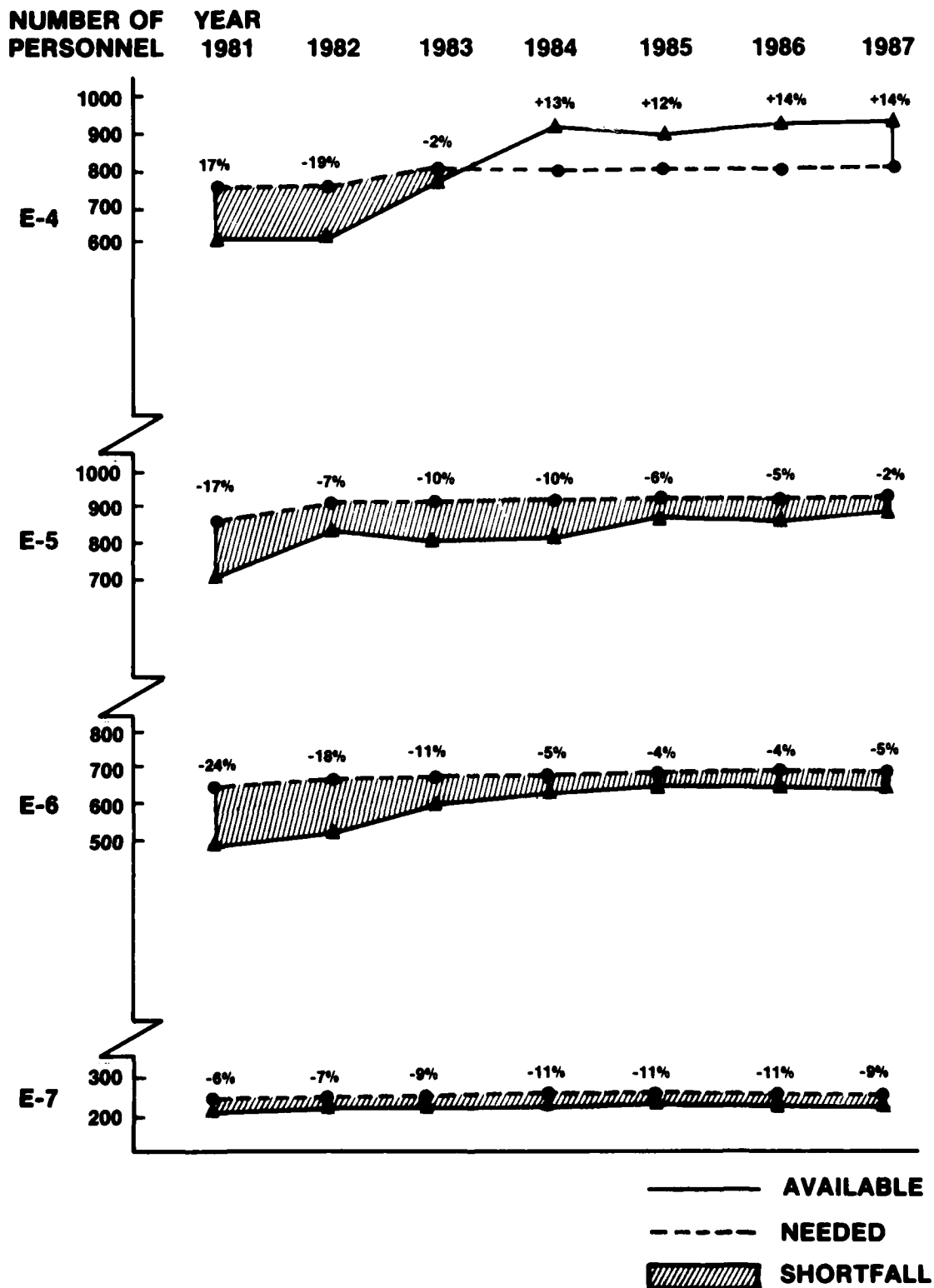
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

AIR TRAFFIC CONTROLLER (AC)



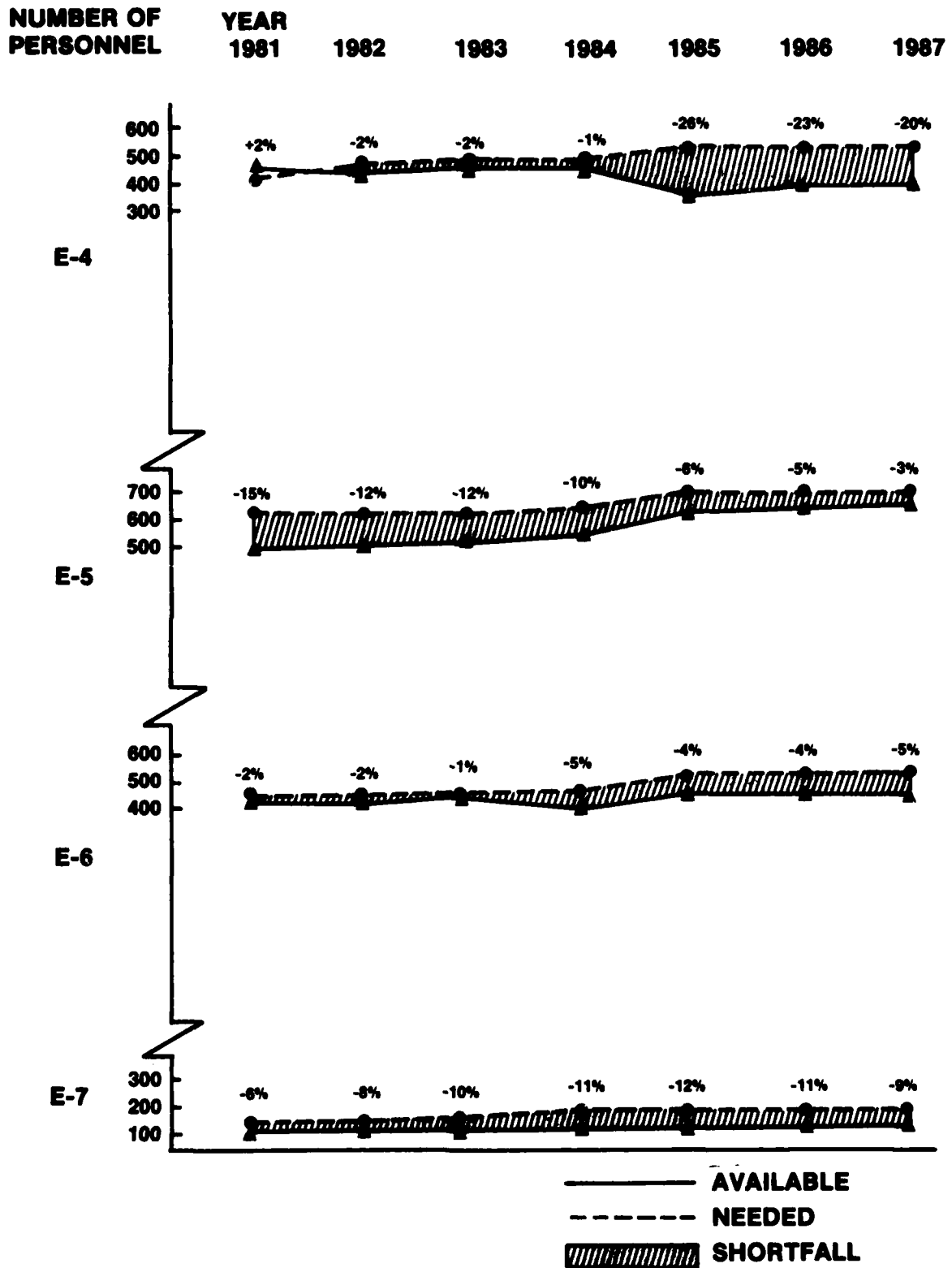
AVIATION ANTISUBMARINE WARFARE TECHNICIAN (AX)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	369	356	385	406	418	430	398
	1.41	1.44	1.58	1.74	1.98	2.28	2.95
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	---	---	---	---	---	---	---
E-4	476	462	476	490	392	406	424
	2.99	2.62	2.60	2.59	2.43	2.38	2.26
	468	471	485	496	528	528	528
	1.71	-1.91	-1.86	-1.21	-25.76	-23.11	-19.70
E-5	533	556	559	581	655	659	678
	5.21	5.13	5.23	5.45	5.09	5.17	5.28
	625	632	635	645	695	695	695
	-14.72	-12.03	-11.97	-9.92	-5.76	-5.18	-2.45
E-6	443	445	460	447	488	488	485
	10.45	10.38	10.58	11.01	10.78	11.03	11.27
	450	455	463	470	510	510	510
	-1.56	-2.20	-.65	-4.89	-4.31	-4.31	-4.90
E-7	178	180	181	183	184	186	189
	16.32	16.14	16.04	16.31	16.49	16.16	16.16
	190	195	200	205	208	208	208
	-6.32	-7.69	-9.50	-10.73	-11.54	-10.58	-9.13
E-8	57	57	57	59	59	59	60
	19.59	19.61	19.59	20.03	20.67	20.28	20.05
	67	67	67	69	69	69	69
	-14.93	-14.93	-14.93	-14.49	-14.49	-14.49	-13.04
E-9	20	21	21	22	23	23	23
	23.30	23.79	24.17	24.77	24.54	23.98	24.54
	25	25	25	25	26	26	26
	-20.00	-16.00	-16.00	-12.00	-11.54	-11.54	-11.54
E-4/9	1707	1721	1754	1782	1801	1821	1859
	7.80	7.67	7.73	7.89	7.98	7.97	7.98
	1825	1845	1875	1910	2036	2036	2036
	-6.47	-6.72	-6.45	-6.70	-11.54	-10.56	-8.69
Total	2076	2077	2139	2188	2219	2251	2257
	6.67	6.60	6.62	6.75	6.85	6.88	7.09
	2055	2075	2108	2155	2286	2286	2286
	---	---	---	---	---	---	---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	533	(Projected No. of men at end of FY)
Means LOS	5.21	(Average Length of Service)
Manpower Requirements	625	(CNO estimates of number required)
End Strength Status	-14.72	(Percentage over or under requirements)

AVIATION ANTISUBMARINE WARFARE TECHNICIAN (AX)



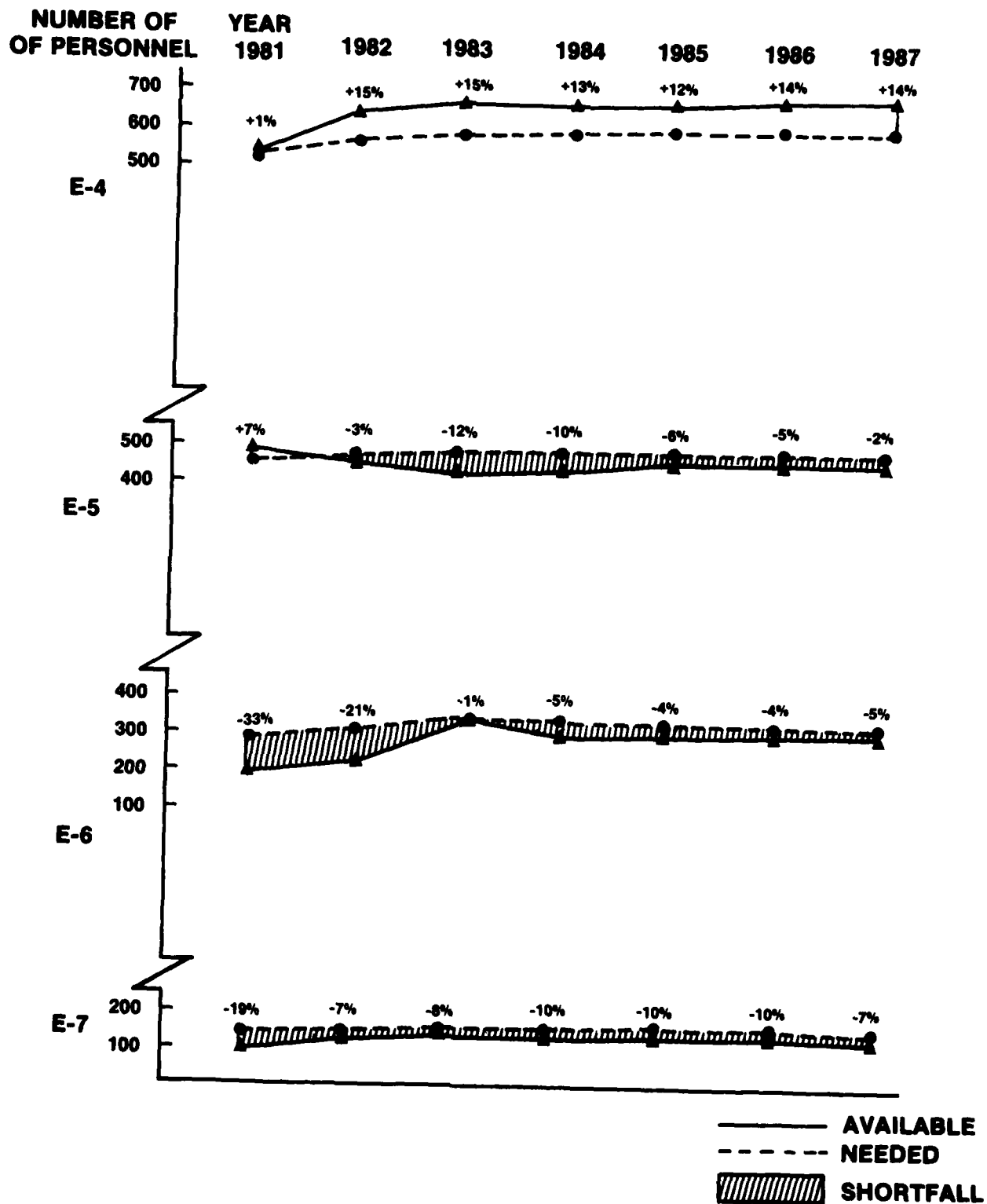
AVIATION BOATSWAIN'S MATE (LAUNCHING & RECOVERY EQUIPMENT)
(ABE)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1352 1.58 ---	1363 1.75 ---	1389 2.08 ---	1419 2.37 ---	1444 2.56 ---	1418 2.85 ---	1464 2.99 ---
E-4	528 3.27 525 .57	656 3.41 571 14.89	670 3.76 583 14.92	660 4.24 585 12.82	661 4.59 589 12.22	670 4.90 589 13.75	673 5.25 589 14.26
E-5	490 5.52 460 6.52	452 5.88 464 -2.59	426 6.18 485 -12.16	437 6.93 485 -9.90	456 7.46 485 -5.98	460 8.10 485 -5.15	474 8.75 485 -2.27
E-6	192 9.99 285 -32.63	238 9.51 300 -20.67	302 9.72 305 -9.98	292 10.52 307 -4.89	295 11.11 308 -4.22	295 11.83 308 -4.22	293 12.25 308 -4.87
E-7	134 14.63 165 -18.79	153 14.65 165 -7.27	153 14.85 167 -8.38	151 14.67 168 -10.12	151 15.13 168 -10.12	151 15.31 168 -10.12	156 15.63 168 -7.14
E-8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
E-9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
E-4/9	1344 6.18 1435 -6.34	1499 6.27 1500 -.07	1551 6.68 1540 .71	1540 7.22 1545 -.32	1563 7.68 1550 .84	1576 8.13 1550 1.68	1596 8.59 1550 2.97
Total	2696 3.88 1845 ---	2862 4.12 1935 ---	2940 4.50 1978 ---	2959 4.89 1990 ---	3007 5.22 2000 ---	2994 5.63 2000 ---	3060 5.91 2000 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 490	(Projected No. of men at end of FY)
Means LOS 5.52	(Average Length of Service)
Manpower Requirements 460	(CNO estimates of number required)
End Strength Status 6.52	(Percentage over or under requirements)

AVIATION BOATSWAIN'S MATE (LAUNCHING & RECOVERY EQUIPMENT) (ABE)



AVIATION FIRE CONTROL TECHNICIAN (AQ)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	803	943	1073	1235	1331	1395	1251
	1.41	1.32	1.43	1.67	1.87	2.06	2.46
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	---	---	---	---	---	---	---
E-4	655	731	810	850	904	917	921
	2.16	2.17	2.16	2.16	2.22	2.25	2.30
	705	710	739	754	806	806	806
	-7.09	2.96	9.61	12.73	12.16	13.77	14.27
E-5	689	789	873	878	931	949	976
	4.59	4.21	4.21	4.34	4.38	4.47	4.44
	900	920	935	945	970	970	970
	-23.44	-14.24	-6.63	-7.09	-4.02	-2.16	.62
E-6	606	576	555	567	575	565	559
	10.69	10.77	10.67	10.53	10.28	9.85	9.20
	615	630	650	660	665	665	665
	-1.46	-8.57	-14.62	-14.09	-13.53	-15.04	-15.94
E-7	220	222	222	224	225	226	230
	14.90	14.69	14.53	14.63	14.96	15.15	15.39
	235	240	245	250	253	253	253
	-6.38	-7.50	-9.39	-10.40	-11.07	-10.67	-9.09
E-8	111	110	112	112	112	113	114
	19.29	19.45	19.39	19.78	20.19	19.38	19.48
	130	130	131	131	131	131	131
	-14.62	-15.38	-14.50	-14.50	-14.50	-13.74	-12.98
E-9	39	40	42	42	43	42	43
	21.99	22.15	22.26	23.00	23.27	22.95	22.94
	49	49	49	48	49	48	48
	-20.41	-18.37	-14.29	-12.50	-12.24	-12.50	-10.42
E-4/9	2320	2468	2614	2673	2790	2812	2843
	7.47	7.05	6.76	6.76	6.67	6.56	6.45
	2634	2679	2749	2788	2874	2873	2873
	-11.92	-7.88	-4.91	-4.12	-2.92	-2.12	-1.04
Total	3123	3411	3687	3908	4121	4207	4094
	5.91	5.47	5.21	5.15	5.12	5.07	5.23
	3074	3119	3199	3253	3344	3343	3343
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 689

Means LOS 4.59

Manpower Requirements 900

End Strength Status -23.44

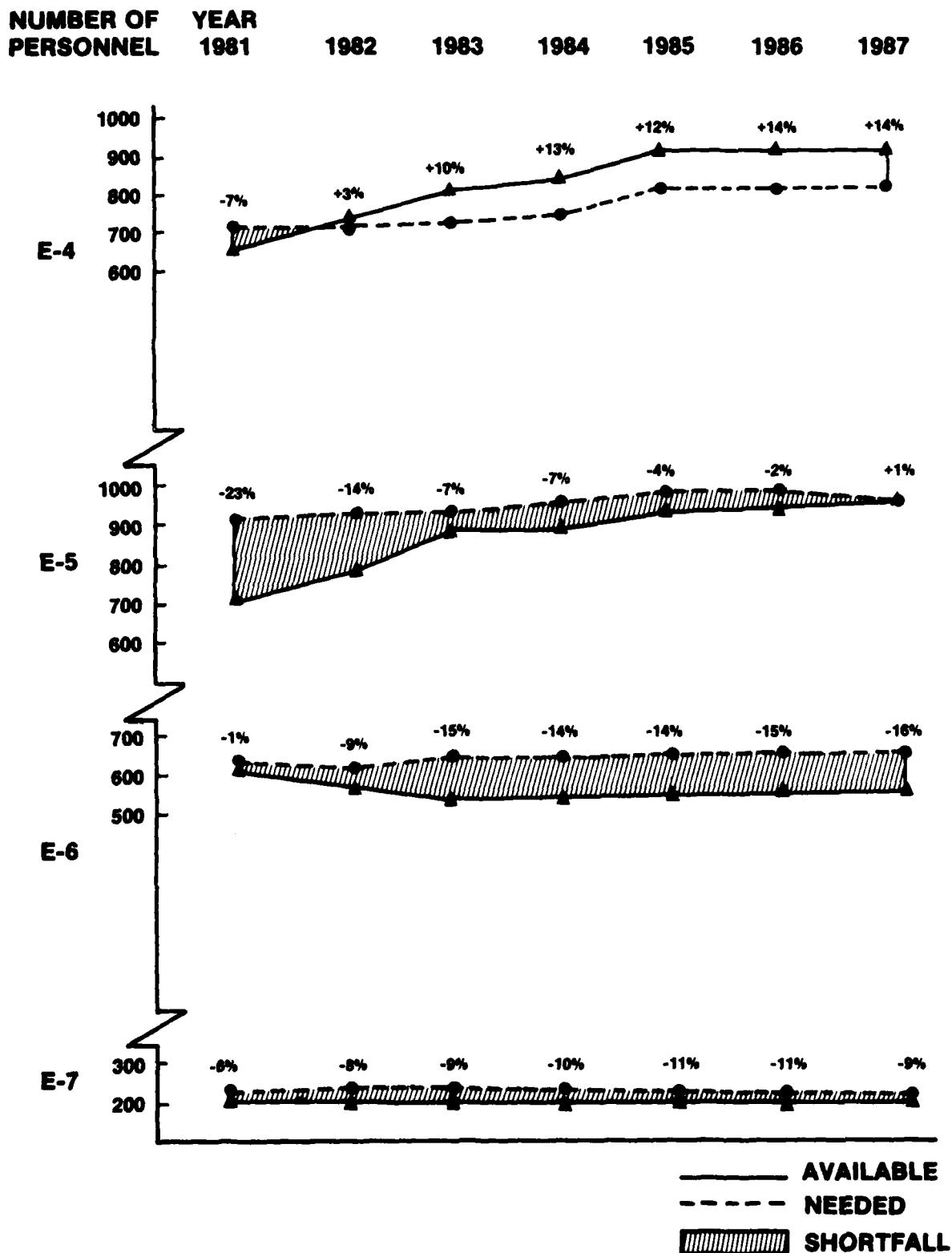
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

AVIATION FIRE CONTROL TECHNICIAN (AQ)



AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	825 1.42 --- ---	785 1.28 --- ---	620 1.26 --- ---	592 1.34 --- ---	607 1.48 --- ---	642 1.67 --- ---	685 1.91 --- ---
E-4	669 3.48 582 14.95	671 3.54 585 14.70	644 3.17 690 -6.67	531 3.02 750 -24.20	410 2.88 800 -48.75	393 2.76 800 -50.87	396 2.65 800 -50.50
E-5	580 6.25 680 -14.71	620 6.32 705 -12.06	747 5.86 850 -12.12	824 5.56 915 -9.95	790 5.41 978 -19.22	757 5.57 978 -22.60	736 5.66 978 -24.74
E-6	522 13.45 530 -1.51	518 13.55 530 -2.26	535 13.12 540 -.93	570 12.65 600 -5.00	623 12.53 650 -4.15	621 12.98 650 -4.46	617 13.30 650 -5.08
E-7	126 18.22 108 16.67	100 18.50 110 -9.09	107 17.95 120 -10.83	106 17.97 120 -11.67	107 17.71 122 -12.30	106 17.33 122 -13.11	107 16.86 122 -12.30
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	1897 8.05 1900 -.16	1909 7.94 1930 -1.09	2033 7.55 2200 -7.59	2031 7.53 2385 -14.84	1930 7.85 2550 -24.31	1877 8.10 2550 -26.39	1856 8.20 2550 -27.22
Total	2722 6.04 2365 ---	2694 6.00 2405 ---	2653 6.08 2675 ---	2623 6.13 2875 ---	2537 6.33 3040 ---	2519 6.46 3040 ---	2541 6.51 3040 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength 580

Means LOS 6.25

Manpower Requirements 680

End Strength Status -14.71

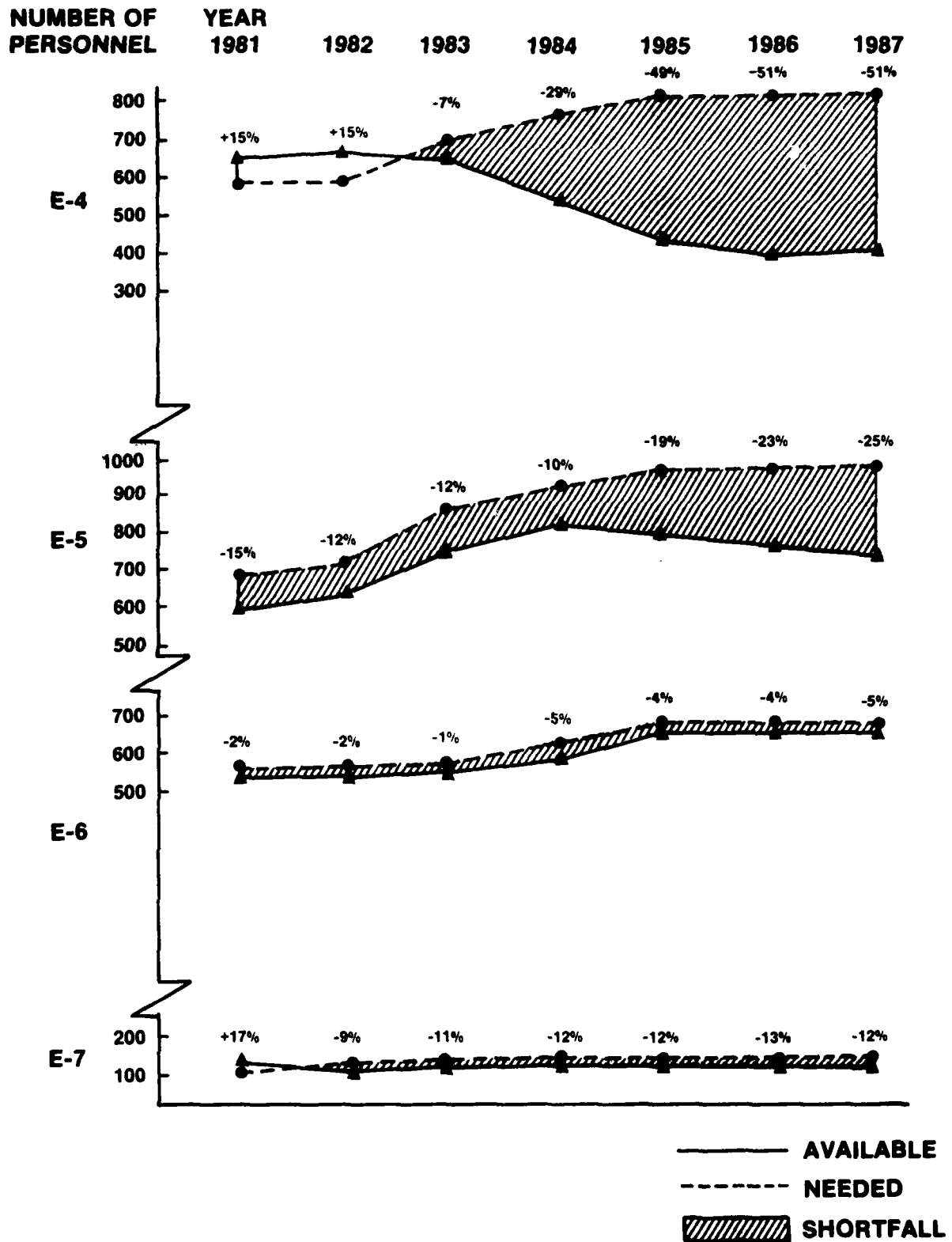
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

AVIATION STRUCTURAL MECHANIC (SAFETY EQUIPMENT) (AME)



BOILER TECHNICIAN (BT)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	6753	6469	6541	6437	6351	6008	5872
	1.79	1.95	2.11	2.30	2.41	2.64	2.83
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	---	---	---	---	---	---	---
E-4	3607	3875	3867	3821	3801	3943	3960
	2.97	3.04	3.21	3.38	3.48	3.57	3.67
	3328	3375	3363	3388	3389	3465	3465
	8.38	14.81	14.99	12.78	12.16	13.80	14.29
E-5	2487	2518	2476	2552	2754	2785	2864
	5.75	5.95	6.11	6.27	6.34	6.61	6.86
	2610	2660	2750	2835	2925	2935	2935
	-4.71	-5.34	-9.96	-9.98	-5.85	-5.11	-2.42
E-6	1172	1277	1427	1520	1576	1578	1567
	10.11	9.59	9.51	9.80	10.11	10.37	10.73
	1500	1540	1575	1600	1645	1650	1650
	-21.87	-17.08	-9.40	-5.00	-4.19	-4.36	-5.03
E-7	722	725	726	721	719	726	739
	16.38	16.08	15.66	15.55	15.31	15.02	15.14
	770	785	800	805	810	815	815
	-6.23	-7.64	-9.25	-10.43	-11.23	-10.92	-9.33
E-8	206	211	215	218	218	224	227
	19.59	19.68	19.66	19.89	20.22	19.81	19.47
	242	248	252	255	256	260	260
	-14.88	-14.92	-14.68	-14.51	-14.84	-13.85	-12.69
E-9	150	158	167	171	175	175	179
	21.97	22.20	22.40	22.70	22.82	22.71	22.55
	190	192	195	197	200	200	200
	-21.50	-17.71	-14.36	-13.20	-12.50	-12.50	-10.50
E-4/9	8344	8764	8878	9003	9243	9431	9536
	6.71	6.60	6.81	7.03	7.14	7.23	7.41
	8640	8800	8935	9080	9225	9325	9325
	-3.43	-.41	-.64	-.85	.20	1.14	2.26
Total	15097	15233	15419	15440	15594	15439	15408
	4.51	4.66	4.82	5.05	5.22	5.44	5.67
	10315	10520	10660	10865	11065	11190	11190
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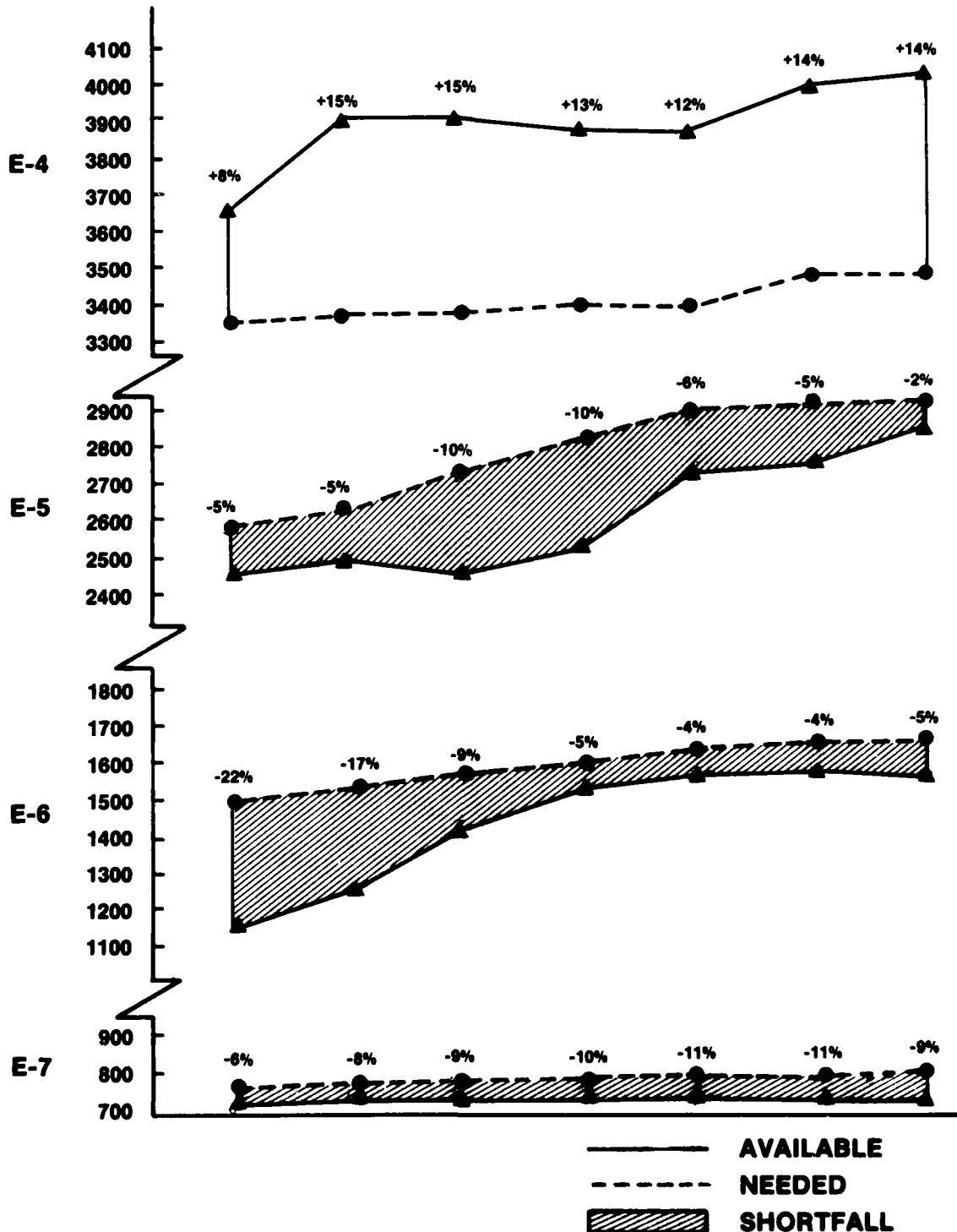
Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 2487
Means LOS 5.75
Manpower Requirements 2610
End Strength Status -4.71

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

BOILER TECHNICIAN (BT)

NUMBER OF PERSONNEL	YEAR	1981	1982	1983	1984	1985	1986	1987
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CRYPTOLOGIC TECHNICIAN (INTERPRETIVE BRANCH) (CTI)

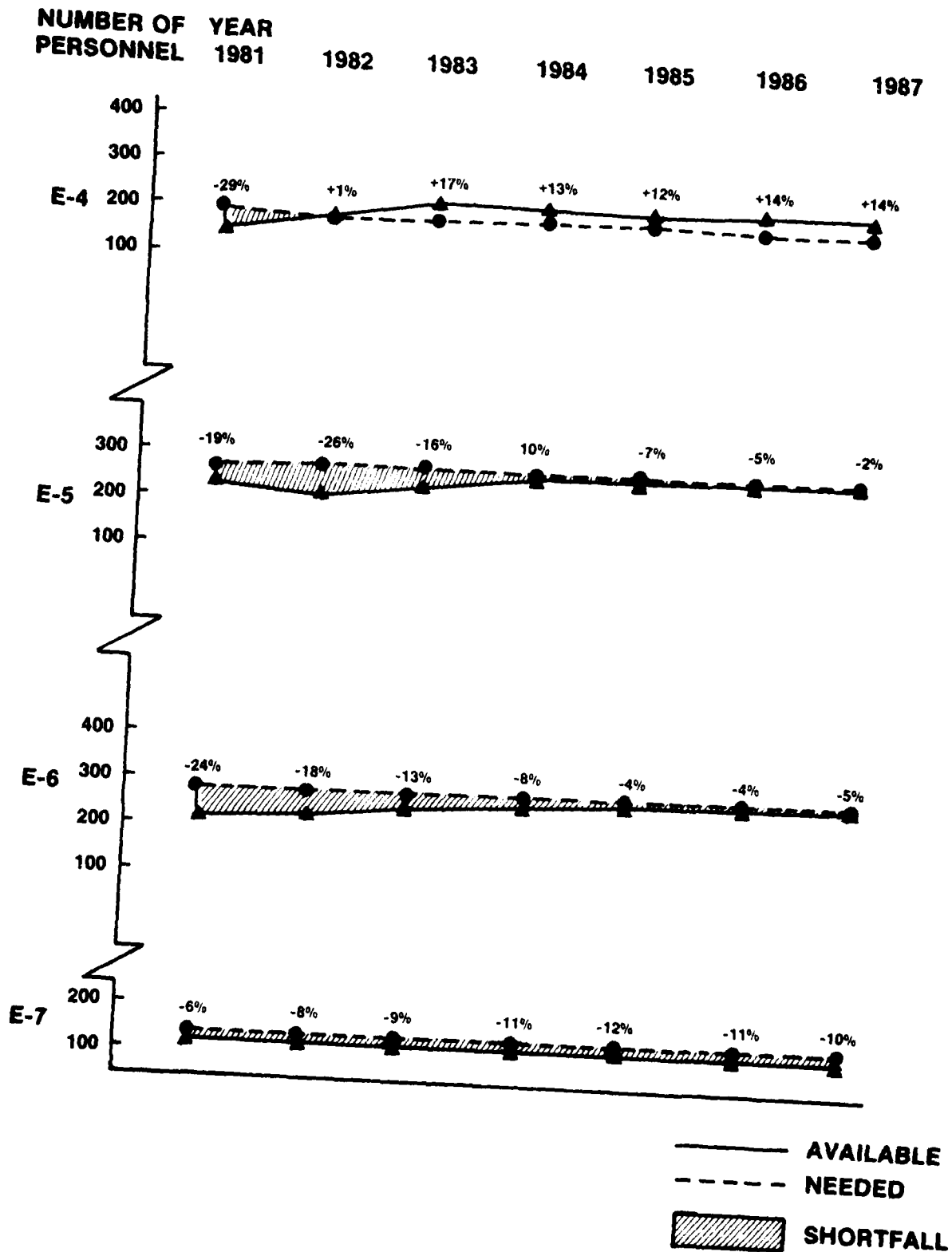
Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	563	626	680	756	812	842	859
	1.36	1.46	1.58	1.86	2.08	2.47	2.85
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	---	---	---	---	---	---	---
E-4	140	195	229	218	216	222	223
	3.34	3.18	3.35	3.52	3.43	3.49	3.72
	196	193	195	193	193	195	195
	-28.57	1.04	17.44	12.95	11.92	13.85	14.36
E-5	231	213	246	264	272	281	289
	5.43	5.58	5.31	5.30	5.45	5.65	5.93
	284	288	293	293	293	296	296
	-18.66	-26.04	-16.04	-9.90	-7.17	-5.07	-2.36
E-6	221	238	254	270	283	282	280
	12.18	11.92	11.85	11.65	11.26	11.76	12.21
	290	290	293	295	295	295	295
	-23.79	-17.93	-13.31	-8.47	-4.07	-4.41	-5.08
E-7	110	111	109	107	106	107	108
	16.55	16.76	16.86	17.22	17.61	17.58	17.30
	117	120	120	120	120	120	120
	-5.98	-7.50	-9.17	-10.83	-11.67	-10.83	-10.00
E-8	24	24	24	24	24	24	24
	20.58	21.29	21.04	21.79	22.33	22.54	22.42
	28	28	28	28	28	28	28
	-14.29	-14.29	-14.29	-14.29	-14.29	-14.29	-14.29
E-9	12	13	14	14	14	14	14
	22.25	23.04	23.79	24.79	25.79	26.79	27.71
	15	16	16	16	16	16	16
	-20.00	-18.75	-12.50	-12.50	-12.50	-12.50	-12.50
E-4/9	738	794	876	897	915	930	938
	9.48	9.21	8.86	8.95	8.93	9.11	9.33
	930	935	945	945	945	950	950
	-20.65	-15.08	-7.30	-5.08	-3.17	-2.11	-1.26
Total	1301	1420	1556	1653	1727	1772	1797
	5.96	5.80	5.68	5.71	5.71	5.96	6.23
	1135	1140	1150	1150	1150	1155	1155
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 231
Means LOS 5.43
Manpower Requirements 284
End Strength Status -18.66

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

CRYPTOLOGIC TECHNICIAN (INTERPRETIVE BRANCH) (CTI)



CRYPTOLOGIC TECHNICIAN (MAINTENANCE BRANCH) (CTM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	186	193	211	254	287	326	346
	2.30	2.48	2.75	2.74	3.10	3.36	3.87
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E-4	655	725	721	820	839	971	1015
	2.06	1.77	1.78	1.94	2.01	2.28	2.46
	879	847	850	852	856	871	871
	-25.48	-14.40	-15.18	-3.76	-1.99	11.48	16.53
E-5	644	677	717	743	815	830	854
	5.01	5.27	5.11	5.46	5.56	6.03	6.31
	755	770	815	825	865	875	875
	-14.70	-12.08	-12.02	-9.94	-5.78	-5.14	-2.40
E-6	414	423	453	439	446	449	446
	10.65	10.75	10.72	11.26	11.58	11.82	11.92
	420	433	456	462	465	470	470
	-1.43	-2.31	-.66	-4.98	-4.09	-4.47	-5.11
E-7	156	157	161	161	161	163	165
	16.06	16.30	16.64	17.13	17.69	17.68	17.51
	167	170	178	180	182	182	182
	-6.59	-7.65	-9.55	-10.56	-11.54	-10.44	-9.34
E-8	47	47	48	48	48	48	49
	19.33	19.78	20.23	20.94	21.63	22.00	22.07
	55	55	56	56	56	56	56
	-14.55	-14.55	-14.29	-14.29	-14.29	-14.29	-12.50
E-9	19	21	21	22	23	23	23
	21.92	22.02	22.64	23.05	23.76	23.59	23.24
	24	25	25	25	26	26	26
	-20.83	-16.00	-16.00	-12.00	-11.54	-11.54	-11.54
E-4/9	1935	2050	2121	2233	2332	2484	2552
	6.63	6.51	6.57	6.65	6.78	6.85	6.94
	2300	2300	2380	2400	2450	2480	2480
	-15.87	-10.87	-10.88	-6.96	-4.82	.16	2.90
Total	2121	2243	2332	2487	2619	2810	2898
	6.25	6.16	6.22	6.25	6.38	6.44	6.57
	2300	2300	2380	2400	2450	2480	2480
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 644

Means LOS 5.01

Manpower Requirements 755

End Strength Status -14.70

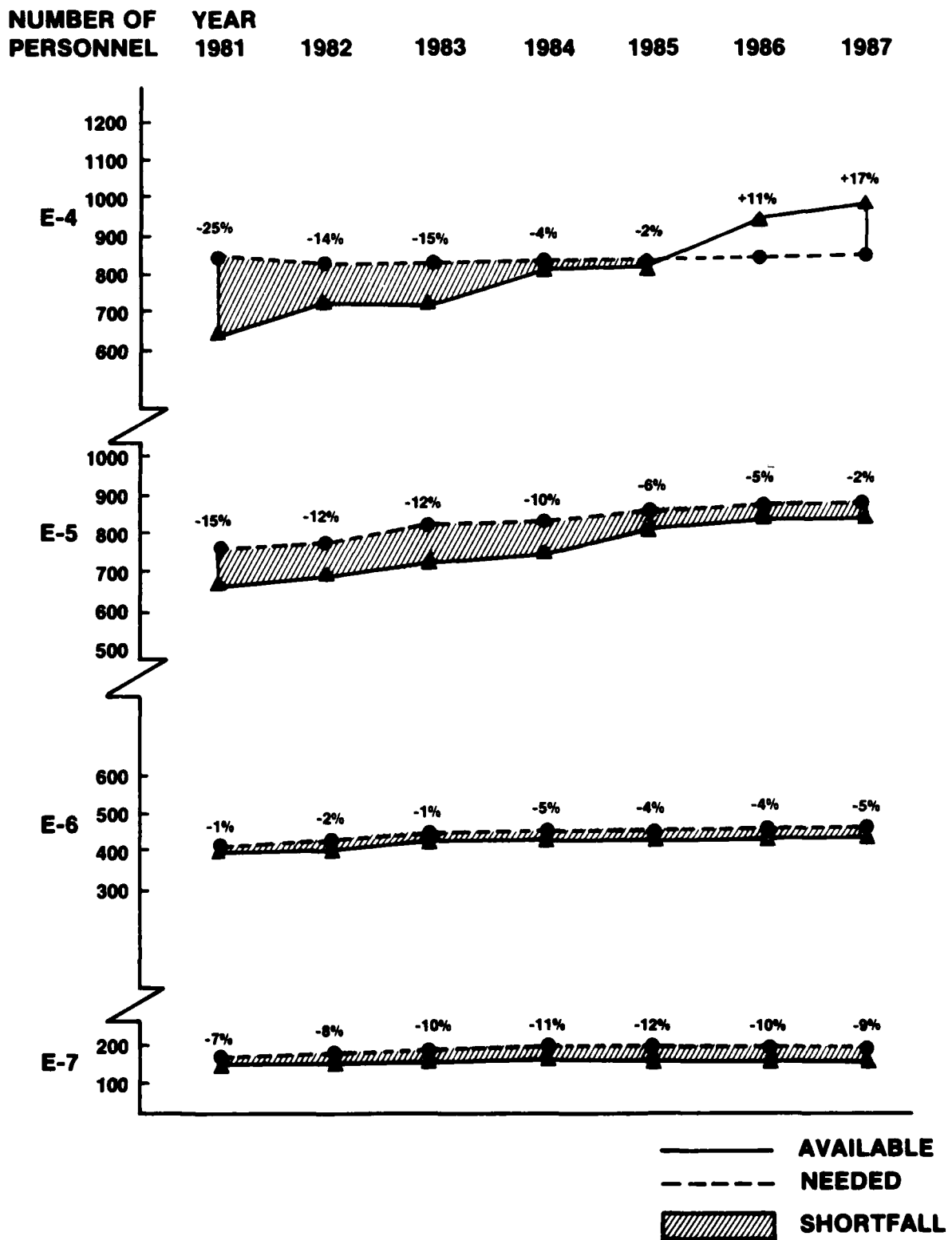
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

CRYPTOLOGIC TECHNICIAN (MAINTENANCE BRANCH) (CTM)



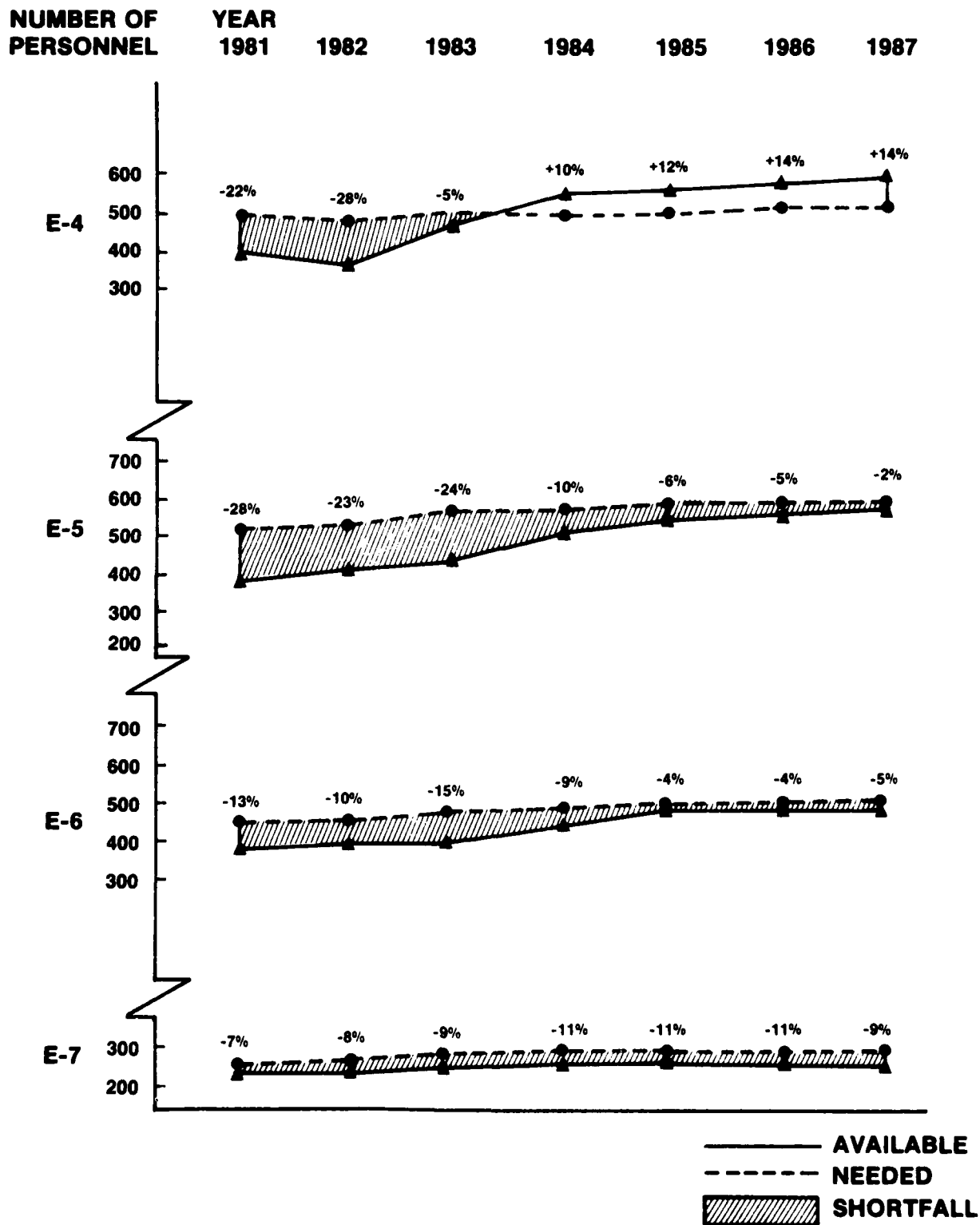
CRYPTOLOGIC TECHNICIAN (TECHNICAL BRANCH) (CTT)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	524	662	666	700	729	805	854
	.99	1.11	1.22	1.38	1.51	1.75	2.03
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E-4	371	334	444	518	533	568	572
	2.83	2.63	2.48	2.63	2.64	2.83	2.99
	476	461	468	471	476	500	500
	-22.06	-27.55	-5.13	9.98	11.97	13.60	14.40
E-5	360	399	419	499	537	546	561
	5.18	4.82	4.61	4.46	4.57	4.89	5.29
	500	518	552	555	570	575	575
	-28.00	-22.97	-24.09	-10.09	-5.79	-5.04	-2.43
E-6	412	439	439	476	512	517	512
	11.91	11.26	10.56	10.33	10.20	10.55	10.92
	475	486	515	525	535	540	540
	-13.26	-9.67	-14.76	-9.33	-4.30	-4.26	-5.19
E-7	212	212	223	226	231	232	236
	16.42	16.53	16.31	16.45	16.54	16.46	16.31
	227	230	246	253	260	260	260
	-6.61	-7.83	-9.35	-10.67	-11.15	-10.77	-9.23
E-8	54	53	57	58	59	60	61
	19.67	20.14	19.64	20.09	20.64	20.28	20.16
	63	63	67	68	69	70	70
	-14.29	-15.87	-14.93	-14.71	-14.49	-14.29	-12.86
E-9	19	22	23	24	26	26	27
	23.13	23.14	24.28	24.54	24.42	24.12	24.57
	24	27	27	28	30	30	30
	-20.83	-18.52	-14.81	-14.29	-13.33	-13.33	-10.00
E-4/9	1428	1459	1605	1801	1898	1949	1969
	8.97	8.79	8.09	7.76	7.77	7.90	8.13
	1765	1785	1875	1900	1940	1975	1975
	-19.09	-18.26	-14.40	-5.21	-2.16	-1.32	-3.30
Total	1952	2121	2271	2501	2627	2754	2823
	6.83	6.40	6.08	5.97	6.04	6.10	6.28
	2032	2055	2146	2171	2211	2246	2246
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	360	(Projected No. of men at end of FY)
Means LOS	5.18	(Average Length of Service)
Manpower Requirements	500	(CNO estimates of number required)
End Strength Status	-28.00	(Percentage over or under requirements)

CRYPTOLOGIC TECHNICIAN (TECHNICAL BRANCH) (CTT)



DATA SYSTEMS TECHNICIAN (DS)

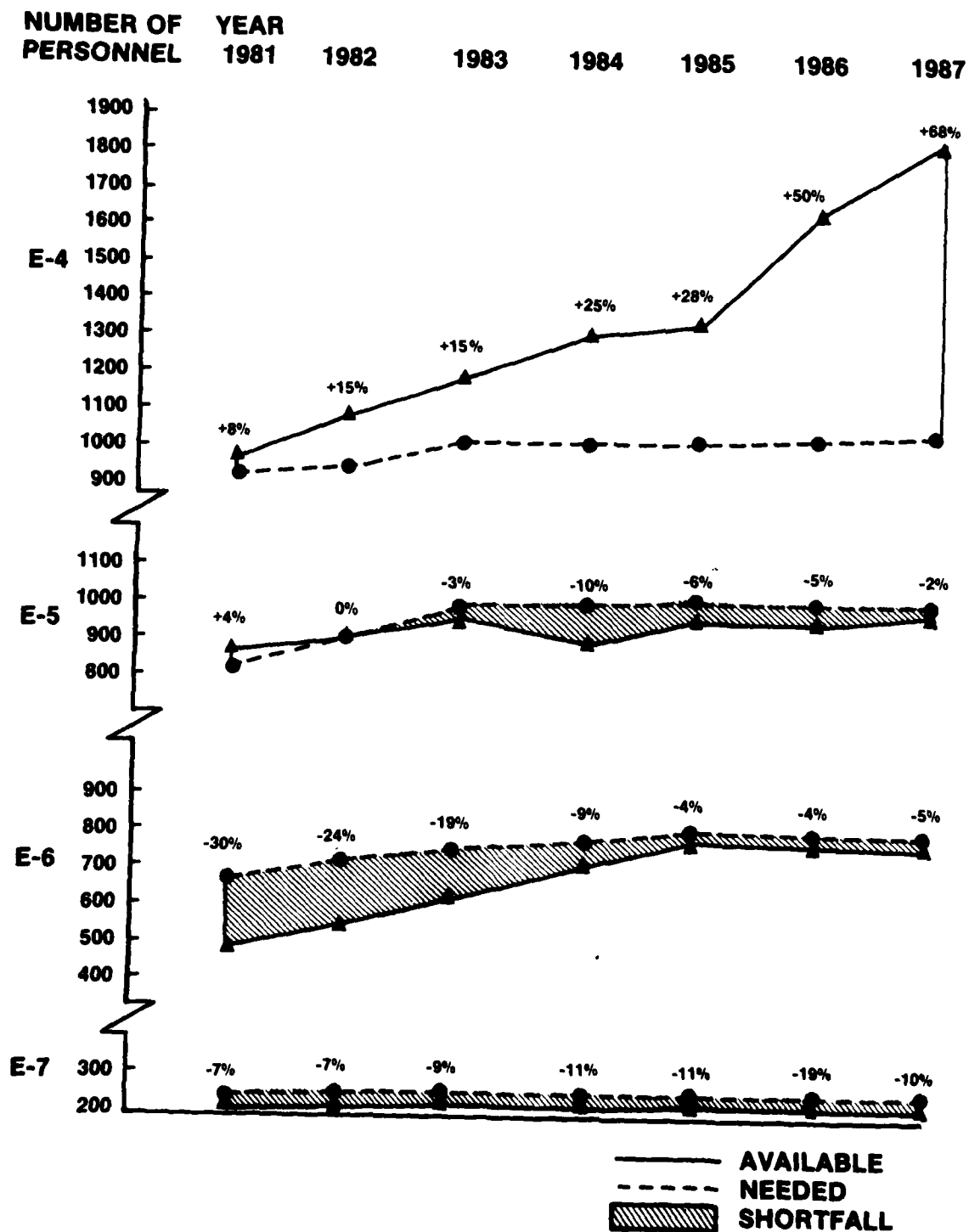
Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	908	967	974	1036	1078	1093	1039
	1.71	2.00	2.37	2.77	3.27	3.80	4.47
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E-4	997	1119	1222	1334	1384	1645	1846
	2.13	1.92	1.96	2.04	2.15	2.45	2.78
	921	975	1063	1068	1083	1098	1098
	8.25	14.77	14.96	24.91	27.79	49.82	68.12
E-5	895	940	1004	954	1017	1024	1054
	4.93	4.89	4.75	4.75	4.66	5.18	5.57
	860	940	1040	1060	1080	1080	1080
	4.07	0	-3.46	-10.00	-5.83	-5.19	-2.41
E-6	490	581	648	758	824	822	817
	8.57	8.70	8.73	9.12	9.71	10.62	11.52
	700	760	800	835	860	860	860
	-30.00	-23.55	-19.00	-9.22	-4.19	-4.42	-5.00
E-7	227	236	254	259	267	272	276
	15.92	16.30	16.70	17.27	17.84	18.53	19.12
	245	255	280	290	300	305	305
	-7.35	-7.45	-9.29	-10.69	-11.00	-10.82	-9.51
E-8	32	36	35	37	39	38	34
	17.84	18.75	19.27	19.82	20.40	20.92	21.29
	33	34	36	36	36	36	36
	-3.03	5.88	-2.78	2.78	8.33	5.56	-5.56
E-9	16	17	18	18	18	18	19
	19.44	20.32	21.17	21.94	22.72	23.28	23.45
	21	21	36	21	21	21	21
	-23.81	-19.05	-2.78	-14.29	-14.29	-14.29	-9.52
E-4/9	2657	2929	3181	3360	3549	3819	4046
	5.73	5.69	5.70	5.88	6.11	6.37	6.64
	2780	2985	3240	3310	3380	3400	3400
	-4.42	-1.88	-1.82	1.51	5.00	12.32	19.00
Total	3565	3896	4155	4396	4627	4912	5085
	4.71	4.78	4.92	5.15	5.45	5.80	6.20
	2786	2991	3246	3316	3386	3406	3406
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 895
Means LOS 4.93
Manpower Requirements 860
End Strength Status +4.07

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

DATA SYSTEMS TECHNICIAN (DS)



ELECTRICIAN'S MATE (EM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	5040	5295	5824	5978	5941	5581	5309
	1.49	1.73	2.02	2.26	2.37	2.56	2.74
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	---	---	---	---	---	---	---
E-4	4719	5073	5198	5277	5300	5467	5491
	2.66	2.50	2.52	2.58	2.62	2.70	2.78
	4330	4418	4520	4678	4725	4805	4805
	8.98	14.83	15.00	12.80	12.17	13.78	14.28
E-5	2729	2851	2887	2817	2976	3013	3098
	4.91	4.97	4.94	4.86	4.76	4.76	4.79
	2775	2855	2975	3040	3150	3175	3175
	-1.66	-.14	-2.96	-7.34	-5.52	-5.10	-2.43
E-6	1907	2001	2099	2255	2346	2387	2429
	9.62	9.27	9.04	9.02	9.18	9.27	9.40
	2450	2550	2575	2610	2650	2650	2650
	-22.16	-21.53	-18.49	-13.60	-11.47	-9.92	-8.34
E-7	1054	1062	1068	1062	1065	1078	1097
	15.12	15.16	15.11	15.33	15.32	15.09	15.03
	1125	1150	1175	1185	1200	1210	1210
	-6.31	-7.65	-9.11	-10.38	-11.25	-10.91	-9.34
E-8	380	399	423	427	434	444	450
	19.31	19.46	19.47	19.81	20.02	19.76	19.75
	445	470	495	500	510	515	515
	-14.61	-15.11	-14.55	-14.60	-14.90	-13.79	-12.62
E-9	121	127	140	143	146	150	154
	23.32	23.37	23.52	23.62	24.10	23.81	23.84
	153	155	164	165	167	172	172
	-20.92	-18.06	-14.63	-13.33	-12.57	-12.79	-10.47
E-4/9	10910	11513	11815	11981	12267	12539	12719
	6.45	6.28	6.26	6.32	6.37	6.37	6.44
	11278	11598	11904	12178	12402	12527	12527
	-3.26	-.73	-.75	-1.62	-1.09	.10	1.53
Total	15950	16808	17639	17959	18208	18120	18028
	4.88	4.84	4.86	4.97	5.06	5.20	5.35
	12353	12713	13089	13433	13702	13852	13852
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 2729

Means LOS 4.91

Manpower Requirements 2775

End Strength Status -1.66

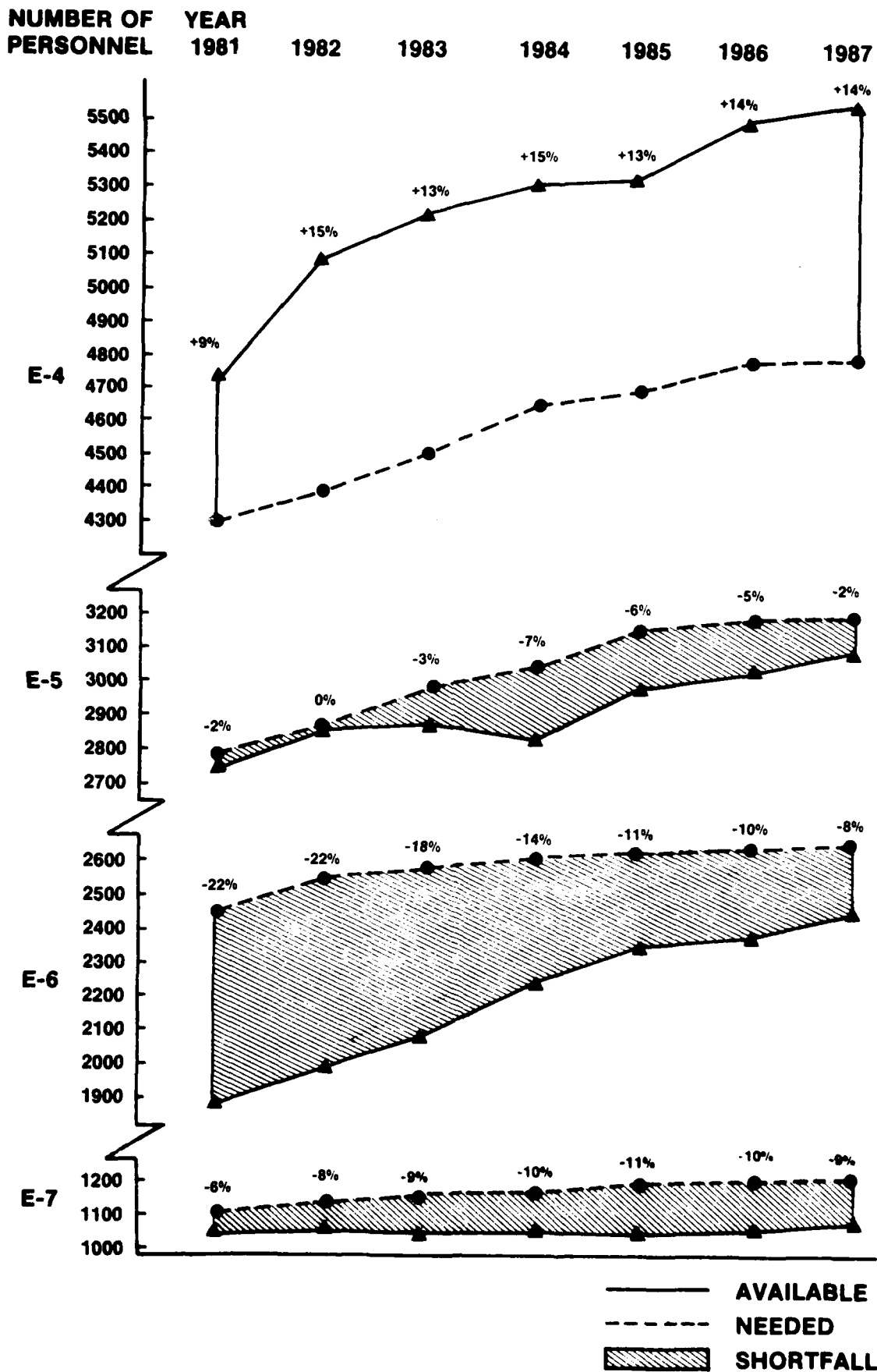
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

ELECTRICIAN'S MATE (EM)



ELECTRONICS WARFARE TECHNICIAN (EW)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	593 1.50 --- ---	784 1.44 --- ---	935 1.57 --- ---	909 1.82 --- ---	812 2.15 --- ---	870 2.56 --- ---	820 2.78 --- ---
E-4	593 2.10 591 .34	613 2.08 625 -1.92	676 2.08 652 3.68	750 2.23 686 9.33	789 2.20 704 12.07	801 2.30 704 13.78	805 2.30 704 14.35
E-5	620 4.77 525 18.10	644 4.59 545 18.17	674 4.46 570 18.25	728 4.29 595 22.35	787 4.41 610 29.02	767 4.73 615 24.72	749 4.85 615 21.79
E-6	259 8.13 465 -44.30	293 7.73 515 -43.11	306 7.65 545 -43.85	314 7.85 585 -46.32	320 7.96 600 -46.67	351 7.84 600 -41.50	383 7.83 600 -36.17
E-7	283 15.79 302 -6.29	279 16.10 302 -7.62	281 15.83 310 -9.35	282 15.77 315 -10.48	289 15.63 325 -11.08	290 15.47 325 -10.77	295 15.56 325 -9.23
E-8	51 19.01 60 -15.00	51 19.52 60 -15.00	51 19.48 60 -15.00	51 20.05 60 -15.00	51 20.56 60 -15.00	52 20.90 60 -13.33	52 21.69 60 -13.33
E-9	17 20.56 22 -22.73	19 21.29 23 -17.39	20 21.85 23 -13.04	21 22.69 24 -12.50	23 23.11 26 -11.54	23 23.85 26 -11.54	23 24.67 26 -11.54
E-4/9	1823 6.63 1965 -7.23	1899 6.52 2070 -8.26	2008 6.29 2160 -7.04	2146 6.16 2265 -5.25	2259 6.13 2325 -2.84	2284 6.28 2330 -1.97	2307 6.40 2330 -.99
Total	2416 5.38 2200 ---	2683 5.04 2312 ---	2943 4.79 2450 ---	3055 4.86 2565 ---	3071 5.08 2640 ---	3154 5.25 2645 ---	3127 5.45 2645 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength 620

Means LOS 4.77

Manpower Requirements 5 25

End Strength Status +18.10

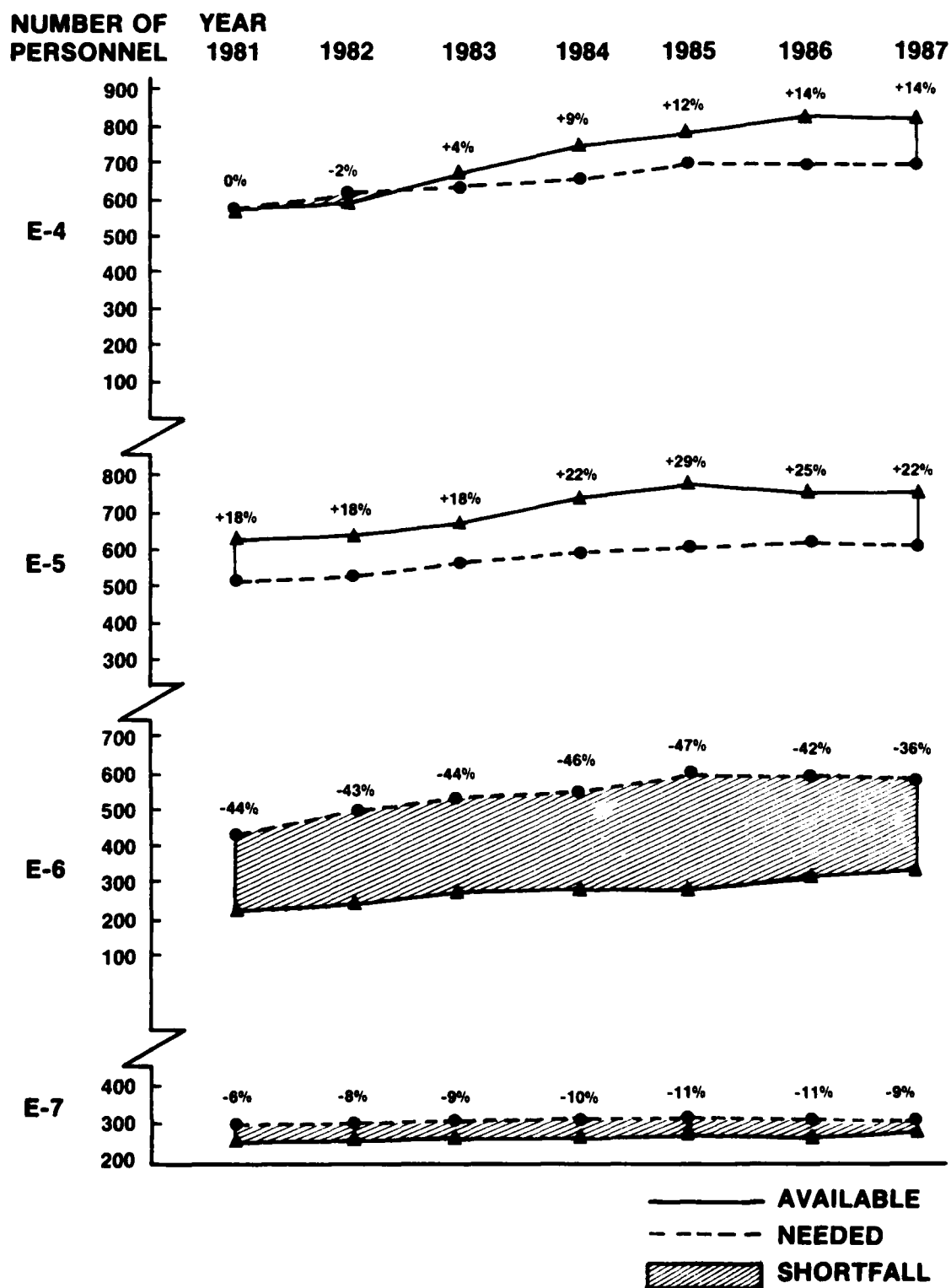
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

ELECTRONICS WARFARE TECHNICIAN (EW)



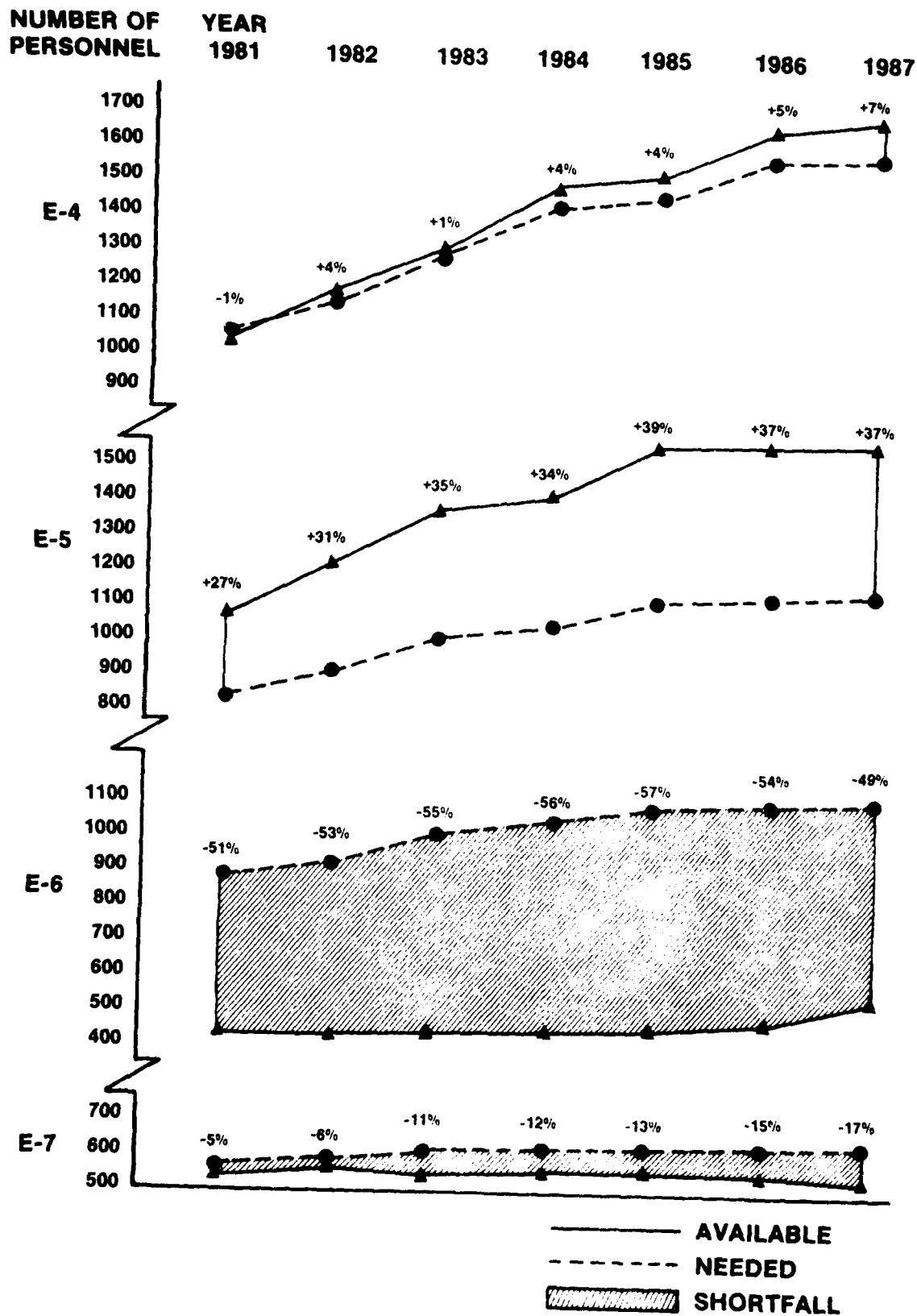
FIRE CONTROL TECHNICIAN (GUN FIRE CONTROL) (FTG)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	745 1.65 ---	836 1.53 ---	798 1.88 ---	687 2.41 ---	584 2.81 ---	587 3.16 ---	612 3.50 ---
E-4	1022 1.96 1032 -.97	1171 1.80 1130 3.63	1282 1.73 1265 1.34	1449 1.78 1397 3.72	1486 1.87 1425 4.28	1601 1.82 1530 4.64	1640 1.82 1530 7.19
E-5	1065 4.42 840 26.79	1201 4.17 920 30.54	1353 4.01 1000 35.30	1398 4.04 1040 34.42	1541 3.97 1110 38.83	1556 4.37 1135 37.09	1552 4.51 1135 36.74
E-6	426 8.24 870 -51.03	427 7.65 900 -52.56	434 7.42 970 -55.26	447 7.37 1010 -55.74	448 7.43 1050 -57.33	488 7.23 1060 -53.96	538 7.19 1060 -49.25
E-7	546 14.35 573 -4.71	562 13.98 600 -6.33	554 13.64 625 -11.36	555 13.56 628 -11.62	550 13.46 635 -13.39	544 13.20 640 -15.00	529 12.72 640 -17.34
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	3059 5.90 3315 -7.72	3361 5.43 3550 -5.32	3623 5.08 3860 -6.14	3849 4.95 4075 -5.55	4025 4.88 4220 -4.62	4189 4.88 4365 -4.03	4259 4.83 4365 -2.43
Total	3804 5.07 3520 ---	4197 4.65 3800 ---	4421 4.51 4160 ---	4536 4.56 4415 ---	4609 4.62 4575 ---	4776 4.66 4735 ---	4871 4.66 4735 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	1065	(Projected No. of men at end of FY)
Means LOS	4.42	(Average Length of Service)
Manpower Requirements	840	(CNO estimates of number required)
End Strength Status	+26.79	(Percentage over or under requirements)

FIRE CONTROL TECHNICIAN (GUN FIRE CONTROL) (FTG)



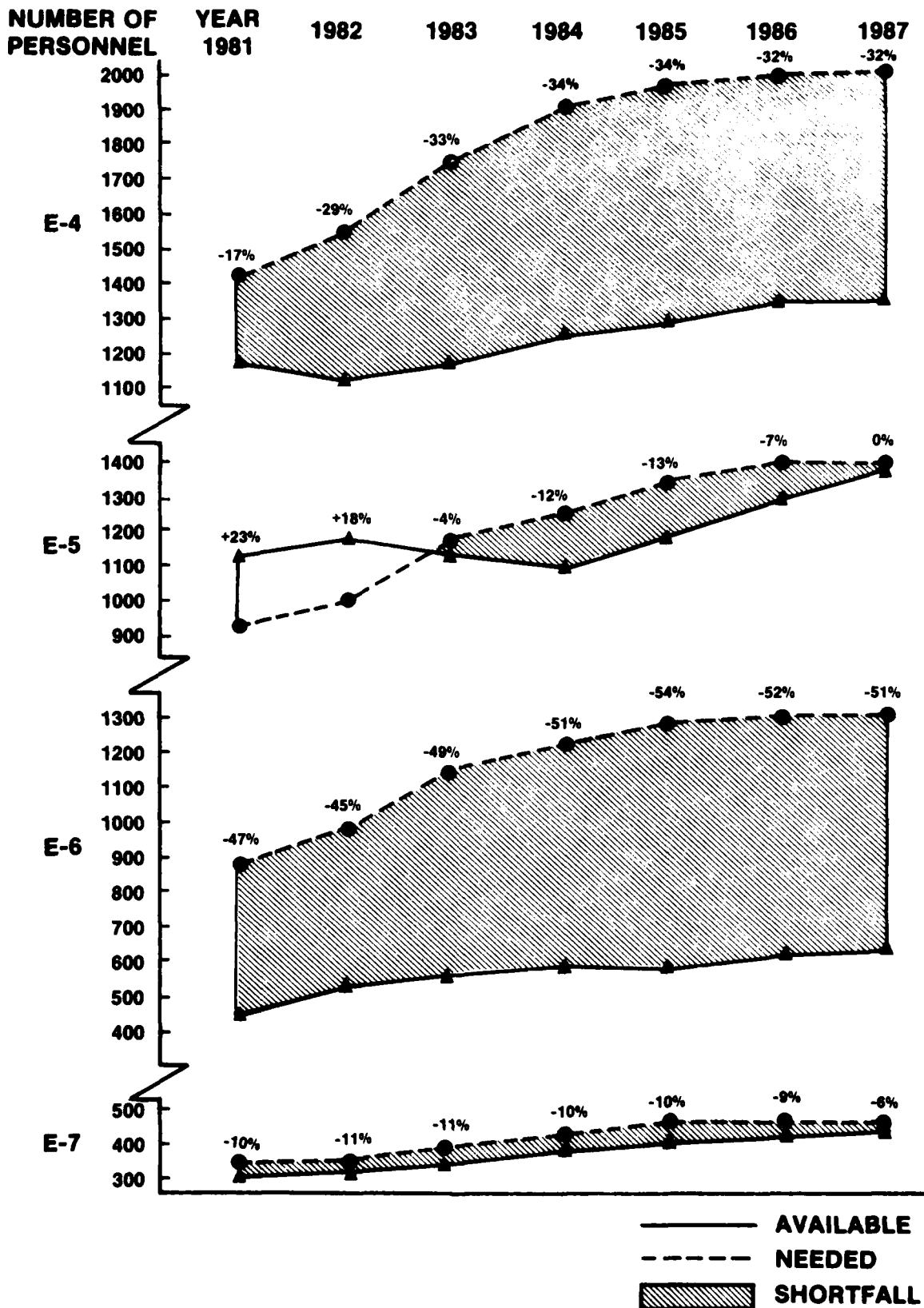
FIRE CONTROL TECHNICIAN (SURFACE MISSILE FIRE CONTROL) (FTM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	356 1.93 --- ---	351 1.96 --- ---	443 1.84 --- ---	511 1.93 --- ---	601 2.10 --- ---	680 2.16 --- ---	576 3.11 --- ---
E-4	1164 2.65 1400 -16.86	1101 2.25 1540 -28.51	1150 2.01 1725 -33.33	1228 1.99 1870 -34.33	1274 1.97 1930 -33.99	1325 2.03 1960 -32.40	1324 1.96 1960 -32.45
E-5	1142 5.02 930 22.80	1184 5.14 1005 17.81	1133 5.18 1175 -3.57	1099 5.02 1250 -12.08	1171 4.87 1340 -12.61	1292 4.79 1385 -6.71	1379 4.79 1385 -.43
E-6	472 8.03 890 -46.97	544 7.61 985 -44.77	579 7.59 1130 -48.76	599 7.92 1212 -50.70	593 8.21 1280 -53.67	619 8.37 1300 -52.38	634 8.44 1300 -51.23
E-7	343 15.57 380 -9.74	356 14.99 400 -11.00	390 13.75 440 -11.36	417 13.12 465 -10.32	448 12.86 500 -10.40	460 13.08 505 -8.91	474 13.30 505 -6.14
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	3121 5.76 3600 -13.31	3185 5.66 3930 -18.96	3252 5.51 4470 -27.25	3343 5.44 4800 -30.35	3489 5.41 5050 -30.97	3696 5.43 5150 -28.23	3811 5.47 5150 -26.00
Total	3477 5.37 3855 ---	3536 5.29 4200 ---	3695 5.07 4750 ---	3854 4.97 5090 ---	4087 4.92 5340 ---	4376 4.93 5440 ---	4387 5.16 5440 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	1142	(Projected No. of men at end of FY)
Means LOS	5.02	(Average Length of Service)
Manpower Requirements	930	(CNO estimates of number required)
End Strength Status	+22.80	(Percentage over or under requirements)

FIRE CONTROL TECHNICIAN (SURFACE MISSILE FIRE CONTROL) (FTM)



GAS TURBINE SYSTEM TECHNICIAN (ELECTRICAL) (GSE)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	176	186	198	207	202	206	184
	1.07	1.13	1.24	1.31	1.35	1.32	1.42
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	---	---	---	---	---	---	---
E-4	172	200	212	223	225	222	216
	1.58	1.55	1.58	1.68	1.68	1.69	1.69
	207	241	297	300	350	398	398
	-16.91	-17.01	-28.62	-25.67	-35.71	-44.22	-45.73
E-5	167	193	217	286	345	384	396
	4.45	3.82	3.43	3.48	3.67	3.83	3.93
	110	131	175	185	215	215	215
	51.82	47.33	24.00	54.59	60.47	78.60	84.19
E-6	88	75	60	59	60	75	89
	8.91	7.91	7.87	7.79	7.50	6.90	6.83
	175	205	250	282	300	300	300
	-49.71	-63.41	-76.00	-79.08	-80.00	-75.00	-70.33
E-7	106	106	101	98	95	88	87
	13.70	13.80	13.86	14.37	14.78	14.93	15.17
	113	123	128	133	135	137	137
	-6.19	-13.82	-21.09	-26.32	-29.63	-35.77	-36.50
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	533	574	590	666	725	769	788
	6.10	5.41	5.00	4.86	4.83	4.78	4.88
	605	700	850	900	1000	1050	1050
	-11.90	-18.00	-30.59	-26.00	-27.50	-26.76	-24.95
Total	709	760	788	875	927	975	972
	4.85	4.36	4.06	4.02	4.07	4.05	4.23
	607	705	870	930	1045	1095	1095
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 167

Means LOS 4.45

Manpower Requirements 110

End Strength Status 51.82

(Projected No. of men at end of FY)

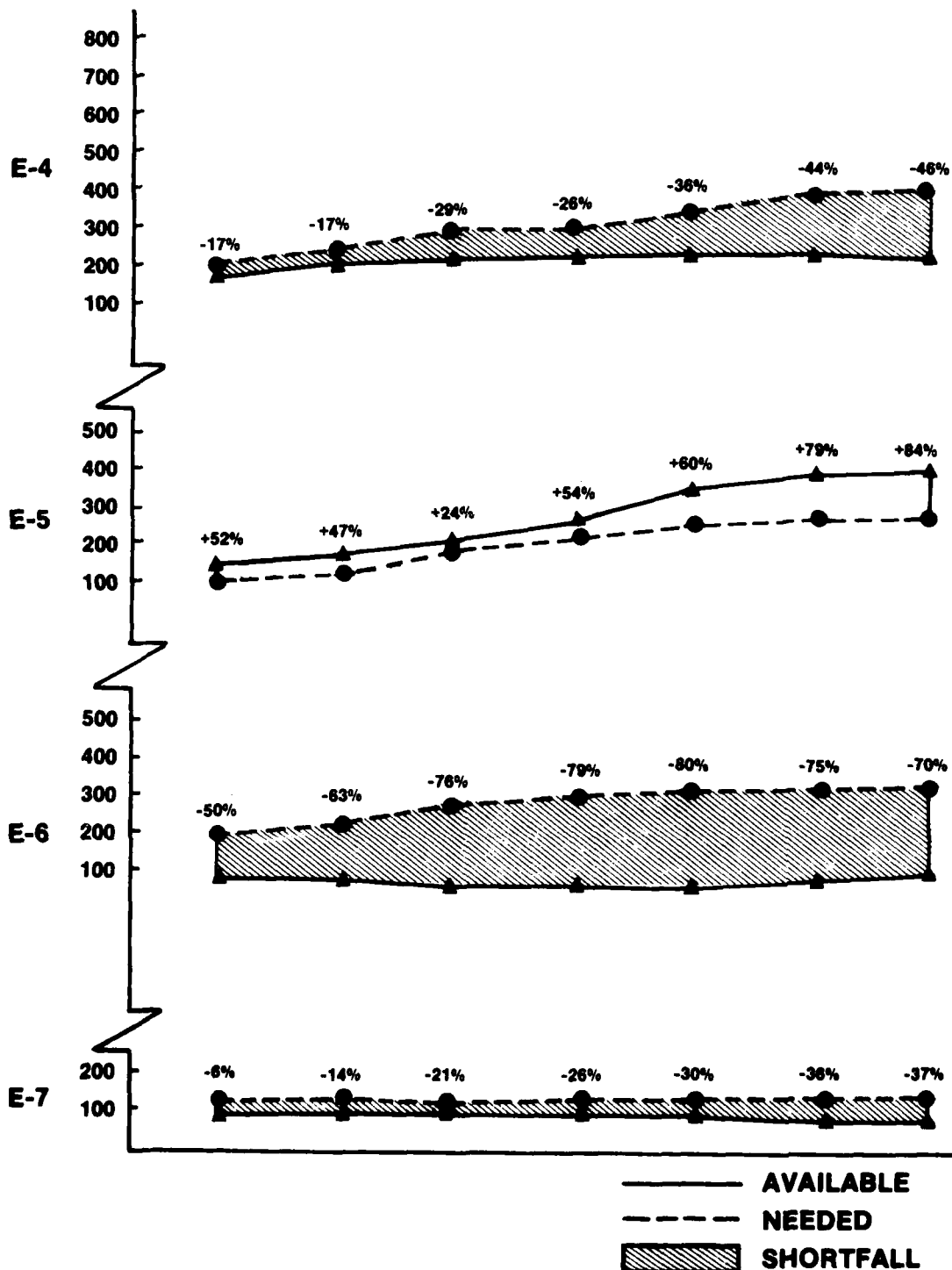
(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

GAS TURBINE SYSTEM TECHNICIAN (ELECTRICAL) (GSE)

NUMBER OF PERSONNEL	YEAR	1982	1983	1984	1985	1986	1987
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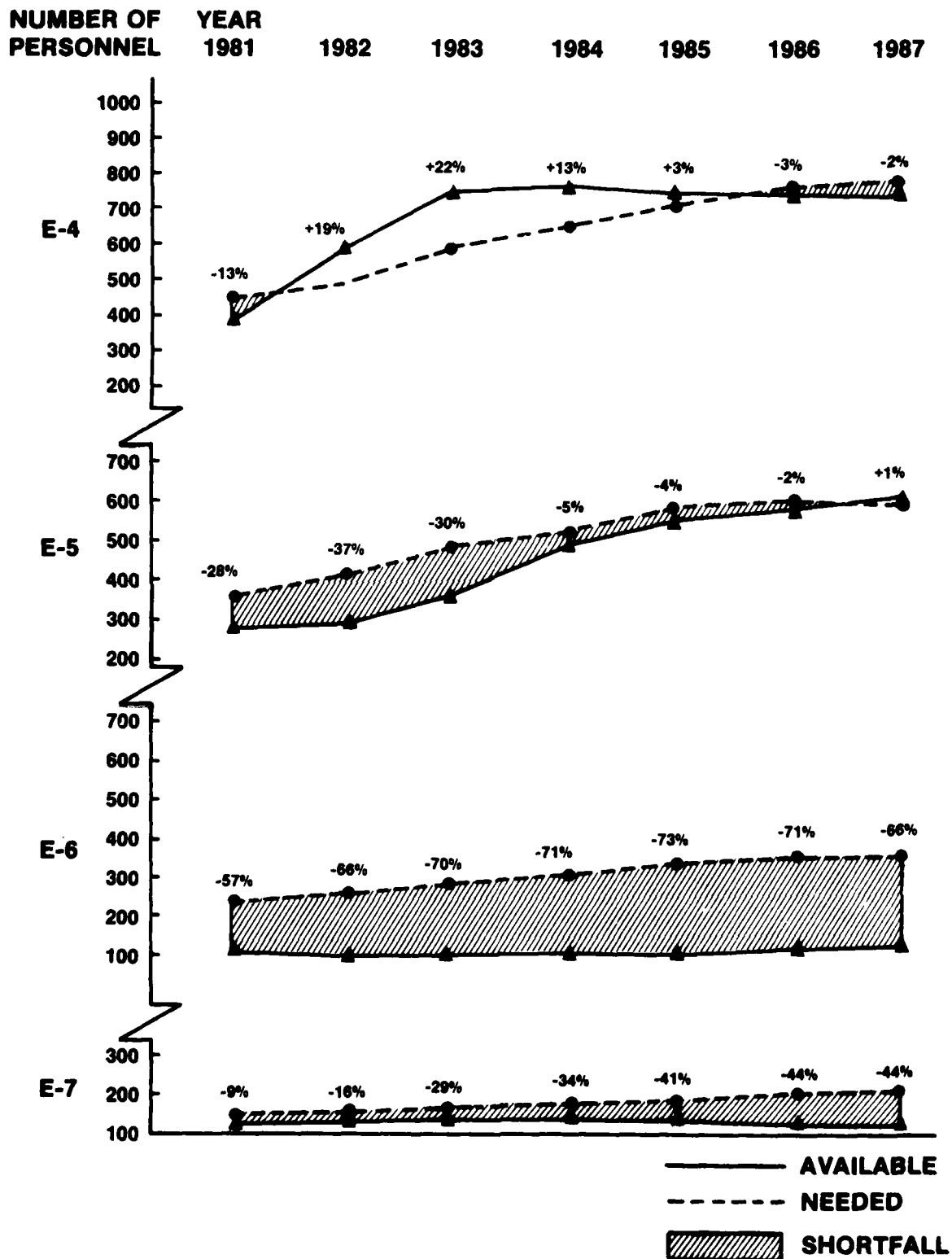
GAS TURBINE SYSTEM TECHNICIAN (MECHANICAL) (GSM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	439	494	502	488	510	499	445
	1.14	1.30	1.39	1.45	1.51	1.54	1.76
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E-4	384	587	725	739	728	727	735
	1.39	1.40	1.60	1.66	1.66	1.65	1.65
	443	495	595	655	705	750	750
	-13.32	18.95	21.85	12.82	3.26	-3.07	-2.00
E-5	242	251	329	487	550	586	608
	4.44	4.40	3.90	3.77	3.86	4.03	4.14
	335	400	470	515	575	600	600
	-27.76	-37.25	-30.00	-5.44	-4.35	-2.33	1.33
E-6	94	85	86	86	93	101	119
	9.91	9.38	9.05	8.86	8.41	8.26	8.03
	222	250	285	300	340	350	350
	-57.66	-66.00	-69.82	-71.33	-72.65	-71.14	-66.00
E-7	123	130	131	132	129	125	126
	14.46	14.82	15.13	15.24	15.02	14.92	14.77
	135	155	185	200	220	225	225
	-8.89	-16.13	29.19	-34.00	-41.36	-44.44	-44.00
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	843	1053	1271	1444	1500	1539	1588
	5.13	4.41	4.09	4.04	4.04	4.07	4.12
	1135	1300	1535	1670	1840	1925	1925
	-25.73	-19.00	-17.20	-13.53	-18.48	-20.05	-17.51
Total	1282	1547	1773	1932	2010	2038	2033
	3.76	3.42	3.33	3.39	3.40	3.45	3.61
	1158	1335	1685	1790	1970	2055	2055
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	242	(Projected No. of men at end of FY)
Means LOS	4.44	(Average Length of Service)
Manpower Requirements	335	(CNO estimates of number required)
End Strength Status	-27.76	(Percentage over or under requirements)

GAS TURBINE SYSTEM TECHNICIAN (MECHANICAL) (GSM)



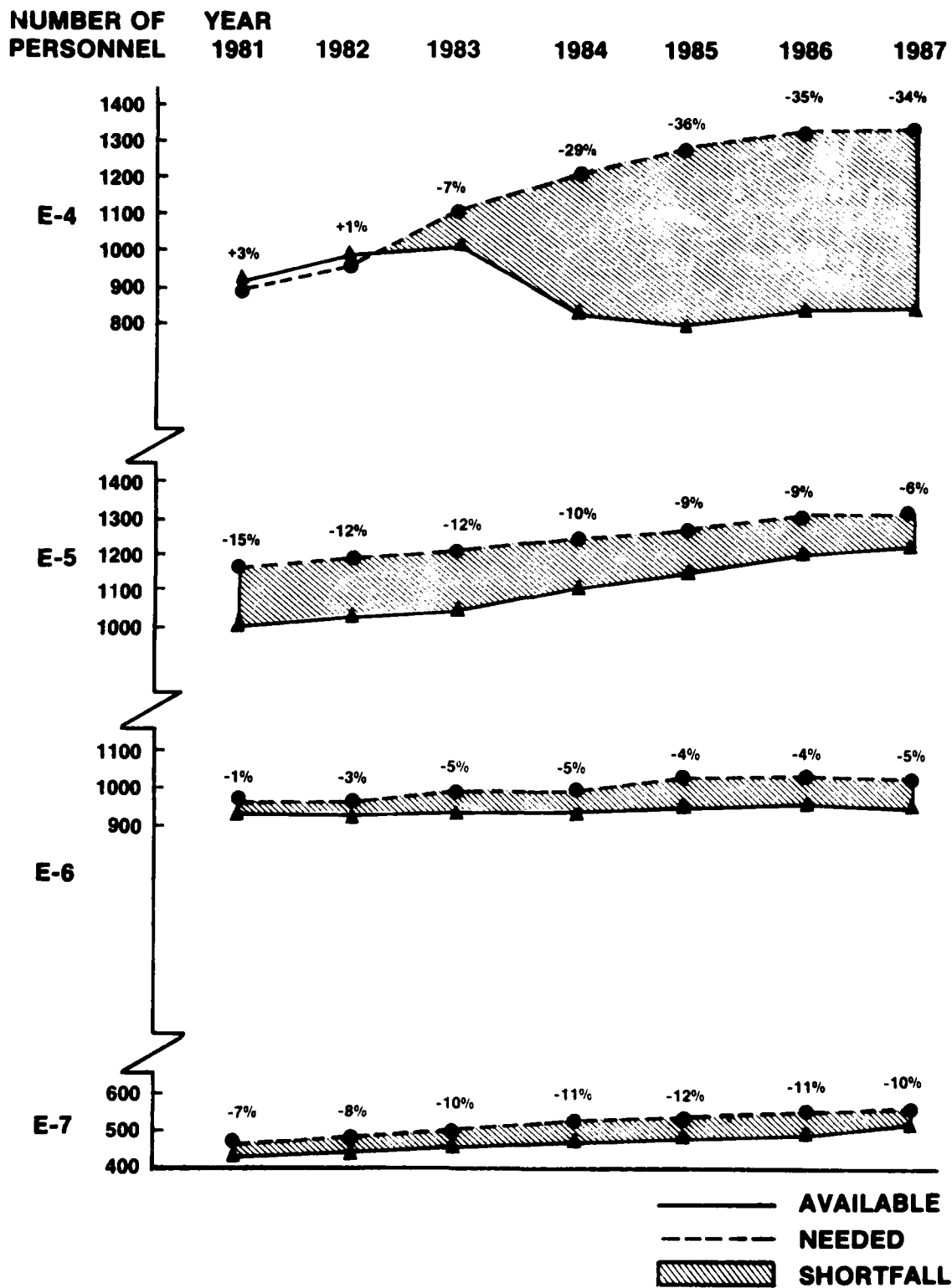
GUNNER'S MATE (GUNS) (GMG)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	2019	1866	1981	2136	2329	2239	2002
	1.50	1.65	1.65	1.84	1.92	2.17	2.57
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E-4	940	1003	1037	855	819	858	871
	3.30	3.13	3.33	3.37	3.34	3.33	3.28
	913	990	1120	1200	1280	1325	1325
	2.96	1.31	-7.41	-28.75	-36.02	-35.25	-34.26
E-5	1002	1055	1087	1135	1171	1203	1237
	5.91	5.60	5.65	5.71	5.86	6.11	6.31
	1175	1200	1235	1260	1285	1315	1315
	-14.72	-12.08	-11.98	-9.92	-8.87	-8.52	-5.93
E-6	938	939	940	945	967	965	959
	11.84	11.51	11.07	10.99	11.27	11.69	12.07
	950	965	990	995	1010	1010	1010
	-1.26	-2.69	-5.05	-5.03	-4.26	-4.46	-5.05
E-7	428	442	466	473	485	497	506
	17.62	17.44	17.11	16.75	16.52	16.41	16.41
	462	480	515	530	550	560	560
	-7.36	-7.92	-9.51	-10.75	-11.82	-11.25	-9.64
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	3308	3439	3530	3408	3442	3523	3573
	8.37	8.01	7.93	8.12	8.28	8.42	8.55
	3500	3635	3860	3985	4125	4210	4210
	-5.49	-5.39	-8.55	-14.48	-16.56	-16.32	-15.13
Total	5327	5305	5511	5544	5771	5762	5575
	5.76	5.77	5.67	5.70	5.71	5.99	6.40
	4000	4185	4475	4635	4805	4925	4925
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength	1002	(Projected No. of men at end of FY)
Means LOS	5.91	(Average Length of Service)
Manpower Requirements	1175	(CNO estimates of number required)
End Strength Status	-14.72	(Percentage over or under requirements)

GUNNER'S MATE (GUNS) (GMG)



GUNNER'S MATE (MISSILES) (GMM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	427	536	603	623	617	636	574
	1.33	1.39	1.51	1.64	1.81	2.10	2.49
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E-4	359	273	294	320	339	321	330
	2.99	2.97	2.97	2.88	2.89	2.80	2.84
	418	461	520	548	555	560	560
	-14.11	-40.78	-43.46	-41.61	-38.92	-42.68	-41.07
E-5	401	422	404	401	412	405	399
	5.19	5.04	5.16	5.03	4.85	4.75	4.75
	380	412	450	470	490	500	500
	5.53	2.43	-10.22	-14.68	-15.92	-19.00	-20.20
E-6	110	119	146	188	204	209	211
	9.23	8.11	7.86	8.17	8.53	8.77	9.01
	330	354	400	430	450	455	455
	-66.67	-66.38	-63.50	-56.28	-54.67	-54.07	-53.63
E-7	197	224	229	227	230	234	238
	14.59	14.48	14.38	14.73	14.80	14.94	15.08
	242	243	250	252	255	260	260
	-18.60	-7.82	-8.40	-9.92	-9.80	-10.00	-8.46
E-8	0	0	0	0	0	0	0
E-9	0	0	0	0	0	0	0
E-4/9	1067	1038	1073	1136	1185	1169	1178
	6.60	6.88	6.89	6.88	6.85	6.97	7.07
	1370	1470	1620	1700	1750	1775	1775
	-22.12	-29.39	-33.77	-33.18	-32.29	-34.14	-33.63
Total	1494	1574	1676	1759	1802	1805	1752
	5.09	5.01	4.96	5.02	5.13	5.26	5.57
	1495	1605	1765	1855	1905	1930	1930
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 401

Means LOS 5.19

Manpower Requirements 380

End Strength Status +5.53

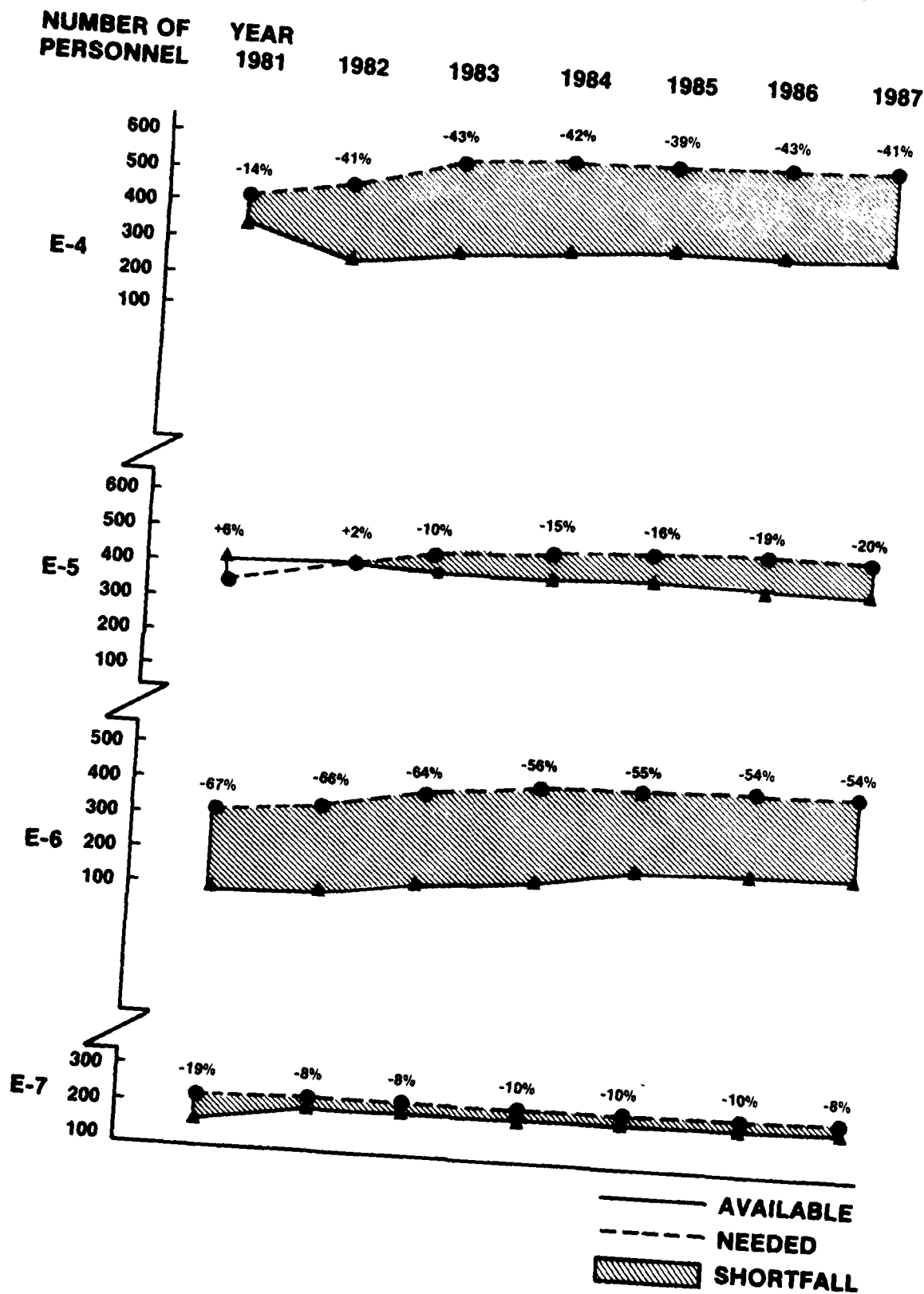
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

GUNNER'S MATE (MISSILES) (GMM)



GUNNER'S MATE (TECHNICIAN) (GMT)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	668	798	952	1155	1226	1313	1377
	1.36	1.39	1.64	2.03	2.42	2.77	3.19
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E-4	577	570	589	588	593	602	605
	2.84	2.83	2.95	3.33	3.53	3.82	4.22
	504	503	513	522	529	529	529
	14.48	13.32	14.81	12.64	12.10	13.80	14.37
E-5	538	573	542	475	471	475	488
	5.33	5.41	5.64	5.89	5.80	6.12	6.52
	495	500	500	500	500	500	500
	8.69	14.60	8.40	-5.00	-5.80	-5.00	-2.40
E-6	295	319	352	418	474	475	471
	10.59	9.61	9.38	9.44	9.59	10.09	10.65
	495	495	496	496	496	496	496
	-40.40	-35.56	-29.03	-15.73	-4.44	-4.23	-5.04
E-7	183	180	183	182	182	184	187
	17.25	16.87	16.42	16.19	16.08	16.14	16.62
	195	195	202	203	206	206	206
	-6.15	-7.69	-9.41	-10.31	-11.65	-10.68	-9.22
E-8	39	44	49	49	49	49	50
	19.81	20.23	20.68	20.74	21.13	21.13	21.70
	46	52	57	57	57	57	57
	-15.22	-15.38	-14.04	-14.04	-14.04	-14.04	-12.28
E-9	12	12	15	15	15	15	15
	22.92	23.58	23.50	24.43	24.83	25.03	25.10
	15	15	17	17	17	17	17
	-20.00	-20.00	-11.76	-11.76	-11.76	-11.76	-11.76
E-4/9	1644	1698	1730	1727	1784	1800	1816
	7.20	7.06	7.21	7.55	7.68	7.99	8.44
	1750	1760	1785	1795	1805	1805	1805
	-6.06	-3.52	-3.08	-3.79	-1.16	-.28	.61
Total	2312	2496	2682	2882	3010	3113	3193
	5.51	5.25	5.23	5.33	5.54	5.79	6.18
	1950	1965	1995	2010	2020	2020	2020
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 538

Means LOS 5.33

Manpower Requirements 495

End Strength Status 8.69

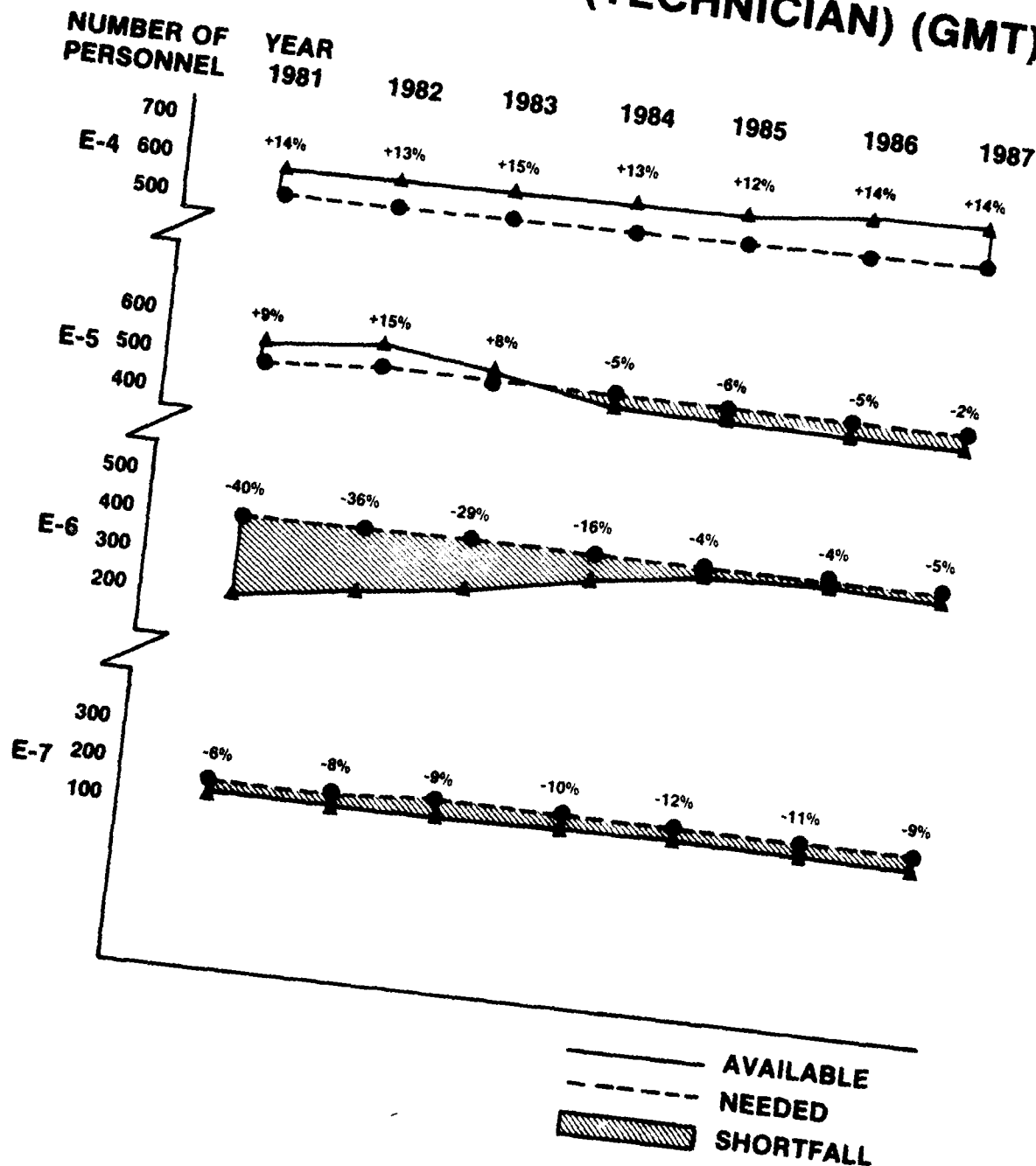
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

GUNNER'S MATE (TECHNICIAN) (GMT)



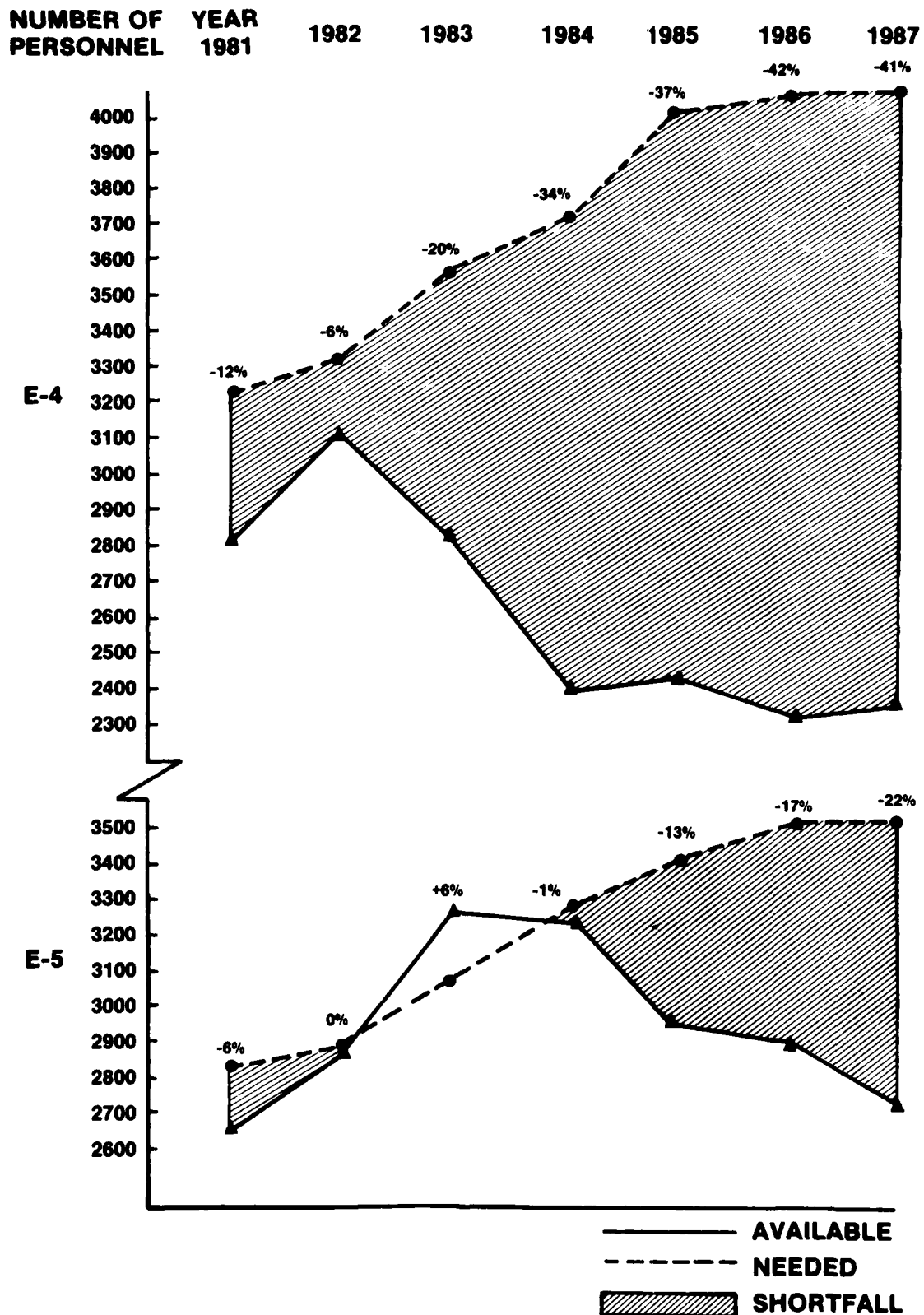
HULL MAINTENANCE TECHNICIAN (HT)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	6152	5623	5656	5686	5813	5657	5496
	1.49	1.53	1.62	1.81	1.96	2.20	2.42
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E-4	2839	3134	2856	2453	2482	2370	2408
	3.04	2.93	3.01	2.93	2.96	2.94	2.94
	3240	3332	3576	3707	3970	4060	4060
	-12.38	-5.94	-20.13	-33.83	-37.48	-41.63	-40.69
E-5	2666	2889	3255	3228	2960	2900	2729
	5.18	5.18	5.10	5.17	5.27	5.28	5.27
	2840	2890	3085	3275	3400	3500	3500
	-6.13	-.03	5.51	-1.44	-12.94	-17.14	-22.03
E-6	1543	1640	1810	2024	2203	2330	2438
	10.64	10.37	10.19	10.12	10.21	10.47	10.76
	2325	2375	2550	2700	2800	2800	2800
	-33.63	-30.95	-29.02	-25.04	-21.32	-16.79	-13.00
E-7	1059	1044	1036	1039	1034	1042	1061
	15.59	15.59	15.58	15.66	15.68	15.63	15.60
	1130	1130	1140	1160	1165	1170	1170
	-6.28	-7.61	-9.12	-10.43	-11.24	-10.94	-9.32
E-8	200	200	203	209	213	215	218
	19.90	19.79	19.90	19.96	20.18	19.66	19.33
	235	235	238	245	250	250	250
	-14.89	-14.89	-14.71	-14.69	-14.80	-14.00	-12.80
E-9	83	89	95	98	100	105	107
	24.22	24.22	24.62	24.74	25.09	24.52	24.51
	105	108	111	113	115	120	120
	-20.95	-17.59	-14.41	-13.27	-13.04	-12.50	-10.83
E-4/9	8390	8996	9255	9051	8992	8962	8959
	7.31	7.06	7.15	7.43	7.61	7.79	7.93
	9875	10070	10700	11200	11700	11900	11900
	-15.04	-10.67	-13.50	-19.19	-23.15	-24.69	-24.71
Total	14542	14619	14911	14737	14805	14619	14455
	4.85	4.94	5.05	5.26	5.39	5.63	5.84
	10740	10965	11655	12225	12800	13000	13000
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

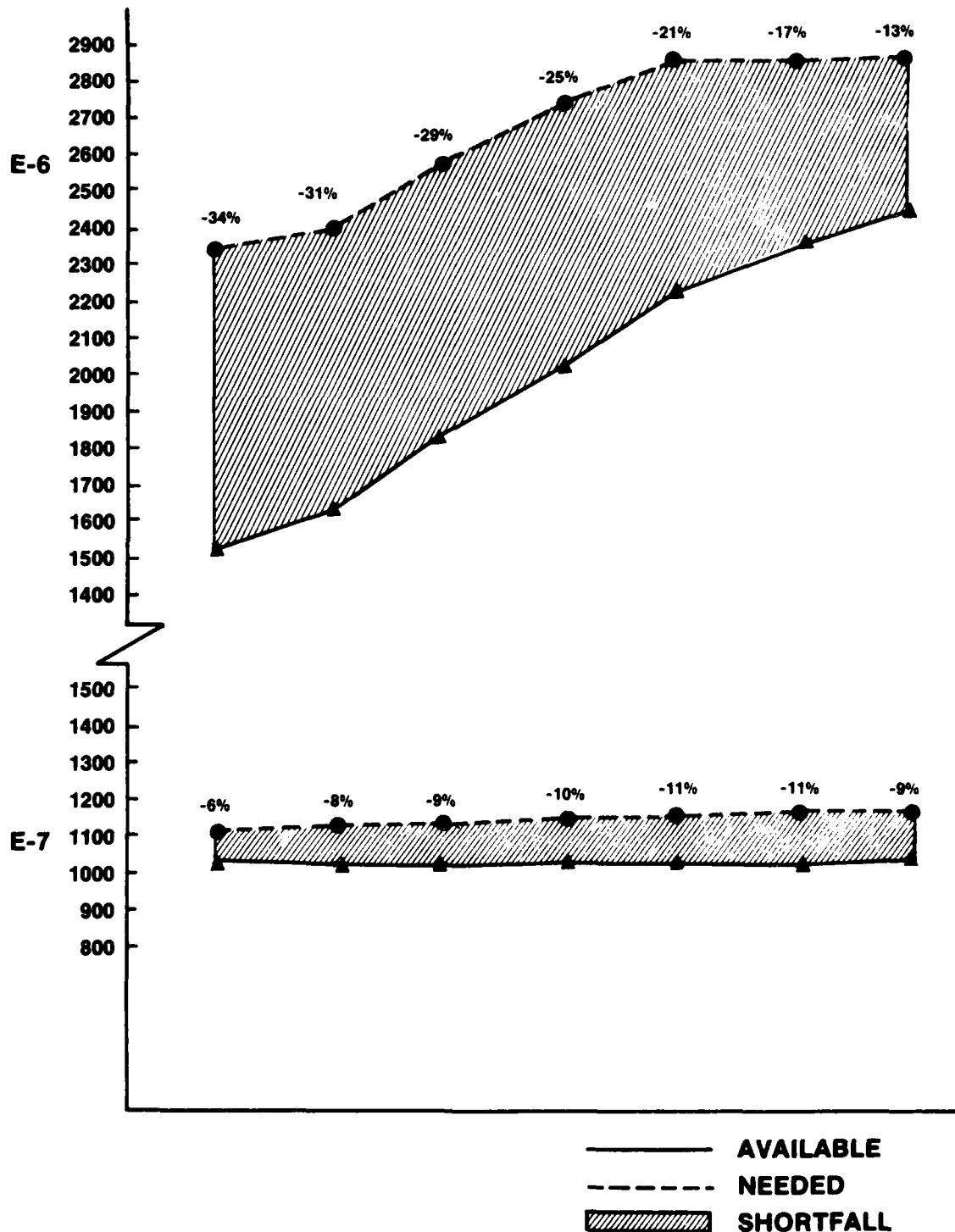
End Strength	2666	(Projected No. of men at end of FY)
Means LOS	5.18	(Average Length of Service)
Manpower Requirements	2840	(CNO estimates of number required)
End Strength Status	-6.13	(Percentage over or under requirements)

HULL MAINTENANCE TECHNICIAN (HT)



HULL MAINTENANCE TECHNICIAN (HT) (CONTINUED)

NUMBER OF PERSONNEL	YEAR	1981	1982	1983	1984	1985	1986	1987
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INSTRUMENTMAN (1M)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	219	269	278	281	255	237	225
	1.18	1.22	1.33	1.34	1.61	1.82	2.10
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E-4	117	119	148	155	150	149	144
	2.84	2.61	2.54	2.73	2.58	2.59	2.55
	146	155	153	156	162	162	162
	-19.86	-23.23	-3.27	-.64	-7.41	-8.02	-11.11
E-5	92	119	142	173	187	188	194
	4.93	4.67	4.62	4.43	4.41	4.46	4.62
	178	180	190	195	198	198	198
	-48.31	-33.89	-25.26	-11.28	-5.56	-5.05	-2.02
E-6	96	98	108	119	125	131	137
	11.73	11.91	11.89	11.61	11.08	11.16	11.50
	122	125	138	145	145	145	145
	-21.31	-21.60	-21.74	-17.93	-13.79	-9.66	-5.52
E-7	48	53	56	55	55	55	56
	14.88	15.03	15.95	16.52	16.88	16.70	16.59
	51	57	62	62	62	62	62
	-5.88	-7.02	-9.68	-11.29	-11.29	-11.29	-9.68
E-8	13	14	15	16	17	16	16
	20.42	20.79	21.17	21.56	21.97	21.00	21.06
	15	16	17	17	18	18	18
	-13.33	-12.50	-11.76	-5.88	-5.56	-11.11	-11.11
E-9	4	4	4	4	4	4	4
	21.50	22.50	23.50	24.50	25.50	26.50	27.50
	5	5	5	5	5	5	5
	-20.00	-20.00	-20.00	-20.00	-20.00	-20.00	-20.00
E-4/9	370	407	473	522	538	543	551
	8.05	7.89	7.65	7.51	7.44	7.45	7.65
	517	538	565	580	590	590	590
	-28.43	-24.35	-16.28	-10.00	-8.81	-7.97	-6.61
Total	589	676	751	803	793	780	776
	5.49	5.23	5.31	5.35	5.56	5.74	6.04
	543	564	591	610	625	625	625
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength 92

Means LOS 4.93

Manpower Requirements 178

End Strength Status-48.31

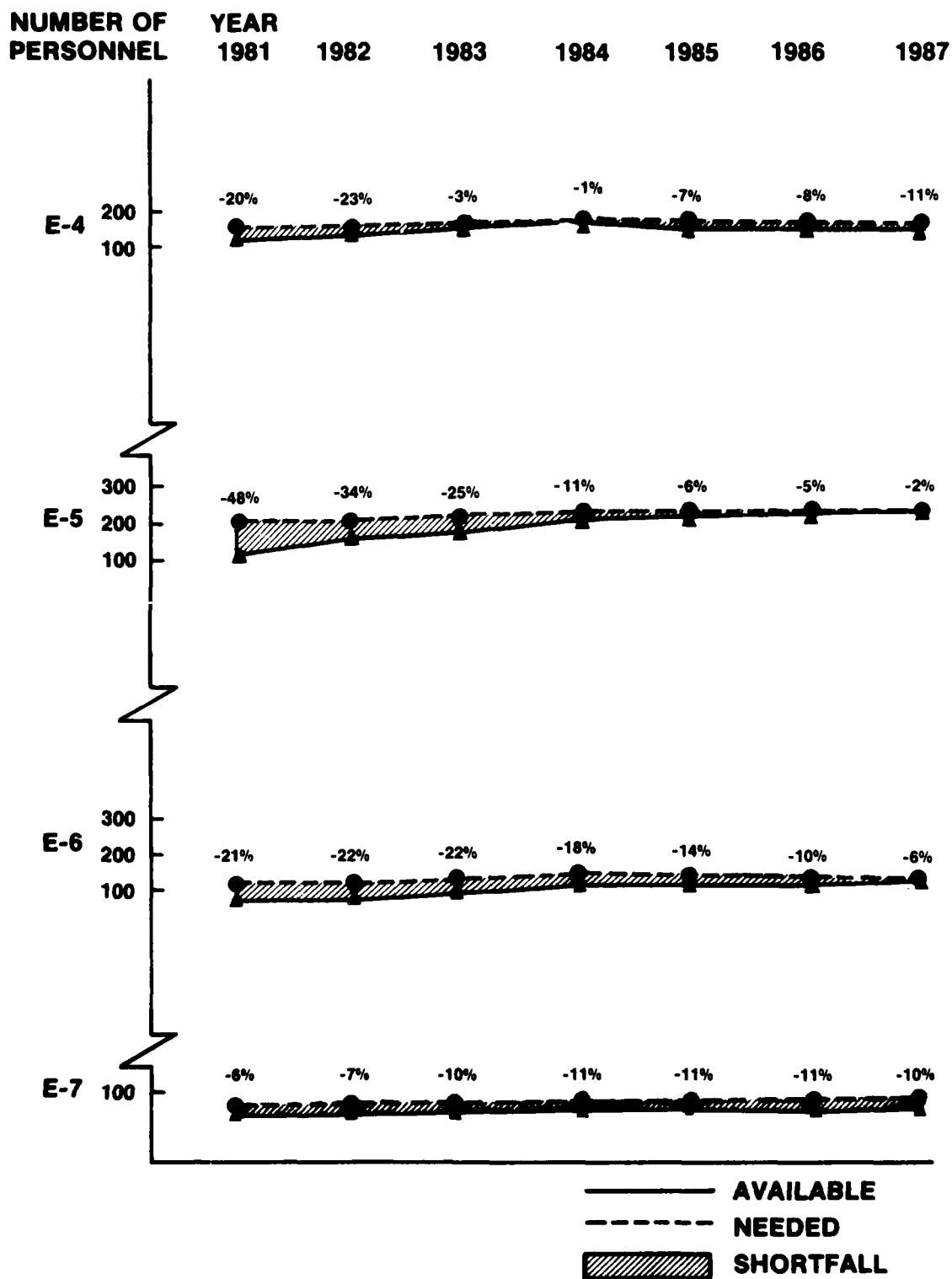
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

INSTRUMENTMAN (IM)



INTERIOR COMMUNICATIONS ELECTRICIAN (IC)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	3677	3546	3755	3882	4026	3932	3762
	1.49	1.57	1.59	1.75	1.88	2.07	2.31
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E-4	1444	1788	1980	1970	1996	2025	2099
	2.59	2.71	3.00	3.23	3.34	3.46	3.57
	2010	2070	2205	2267	2380	2435	2435
	-28.16	-13.62	-10.20	-13.10	-16.13	-16.84	-13.80
E-5	1791	1789	1814	1751	1765	1784	1834
	4.72	4.77	4.92	5.00	5.04	5.08	5.19
	1785	1790	1825	1850	1875	1880	1880
	.34	-.06	-.60	-5.35	-5.87	-5.11	-2.45
E-6	840	891	947	1037	1127	1192	1192
	9.69	9.13	9.00	9.05	9.17	9.31	9.74
	1180	1215	1240	1245	1250	1255	1255
	-28.81	-26.67	-23.63	-16.71	-9.84	-5.02	-5.02
E-7	520	550	568	573	576	588	598
	15.73	15.70	15.51	15.57	15.64	15.62	15.67
	560	595	625	640	650	660	660
	-7.14	-7.56	-9.12	-10.47	-11.38	-10.91	-9.39
E-8	60	55	56	58	60	60	61
	20.13	20.59	20.89	21.17	21.35	21.75	21.58
	65	65	65	68	70	70	70
	-7.69	-15.38	-13.85	-14.71	-14.29	-14.29	-12.86
E-9	21	18	18	19	20	20	21
	22.79	23.83	24.50	24.34	24.20	23.70	23.60
	22	22	21	22	23	23	23
	-4.55	-18.18	-14.29	-13.64	-13.04	-13.04	-8.70
E-4/9	4676	5091	5383	5408	5544	5669	5805
	6.46	6.23	6.28	6.49	6.61	6.73	6.86
	5622	5757	5981	6092	6248	6323	6323
	-16.83	-11.57	-10.00	-11.23	-11.27	-10.34	-8.19
Total	8353	8637	9138	9290	9570	9601	9567
	4.27	4.32	4.35	4.51	4.62	4.82	5.07
	6232	6382	6611	6737	6913	6998	6998
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength 1791

Means LOS 4.72

Manpower Requirements 1785

End Strength Status .34

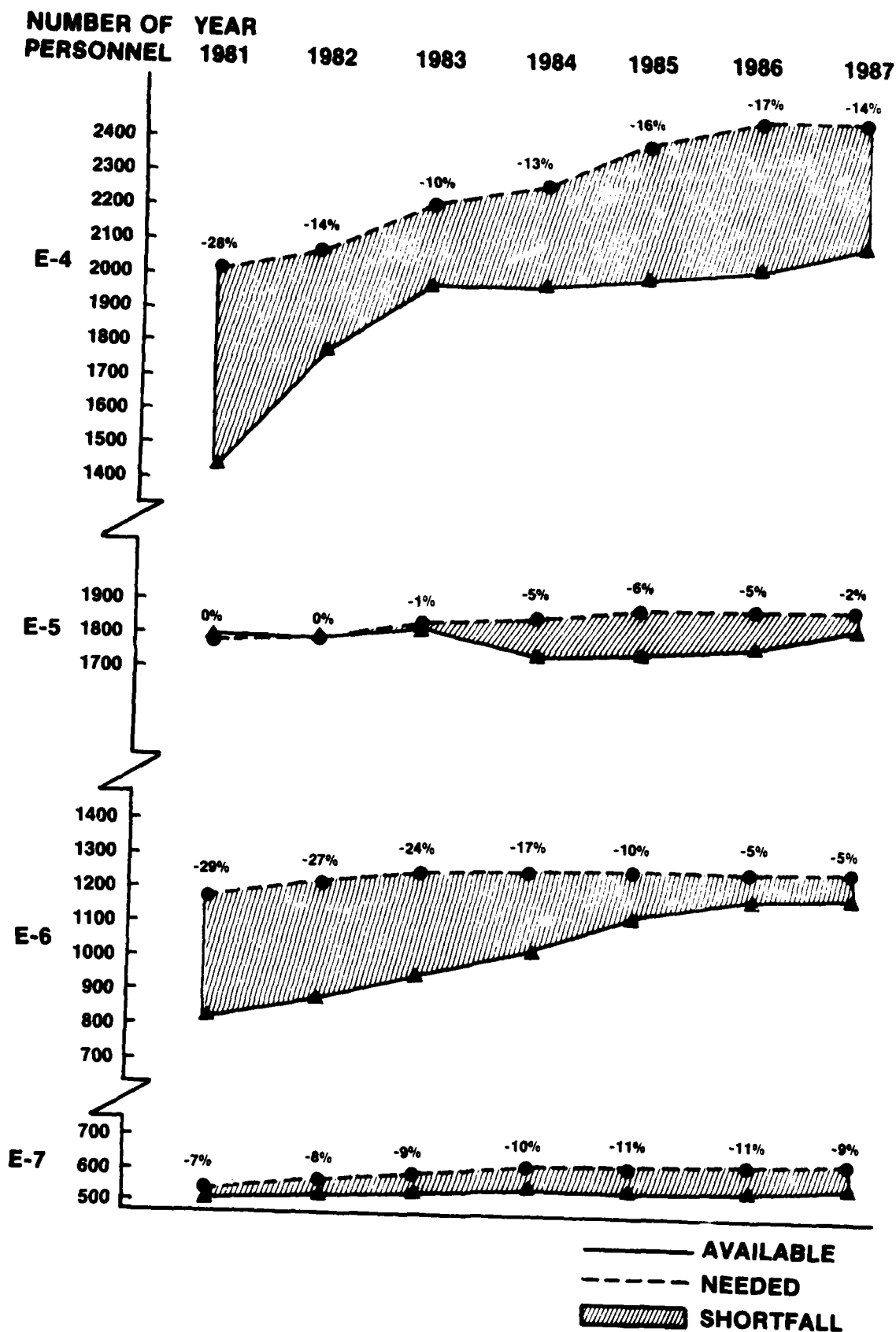
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

INTERIOR COMMUNICATIONS ELECTRICIAN (IC)



INTELLIGENCE SPECIALIST (IS)

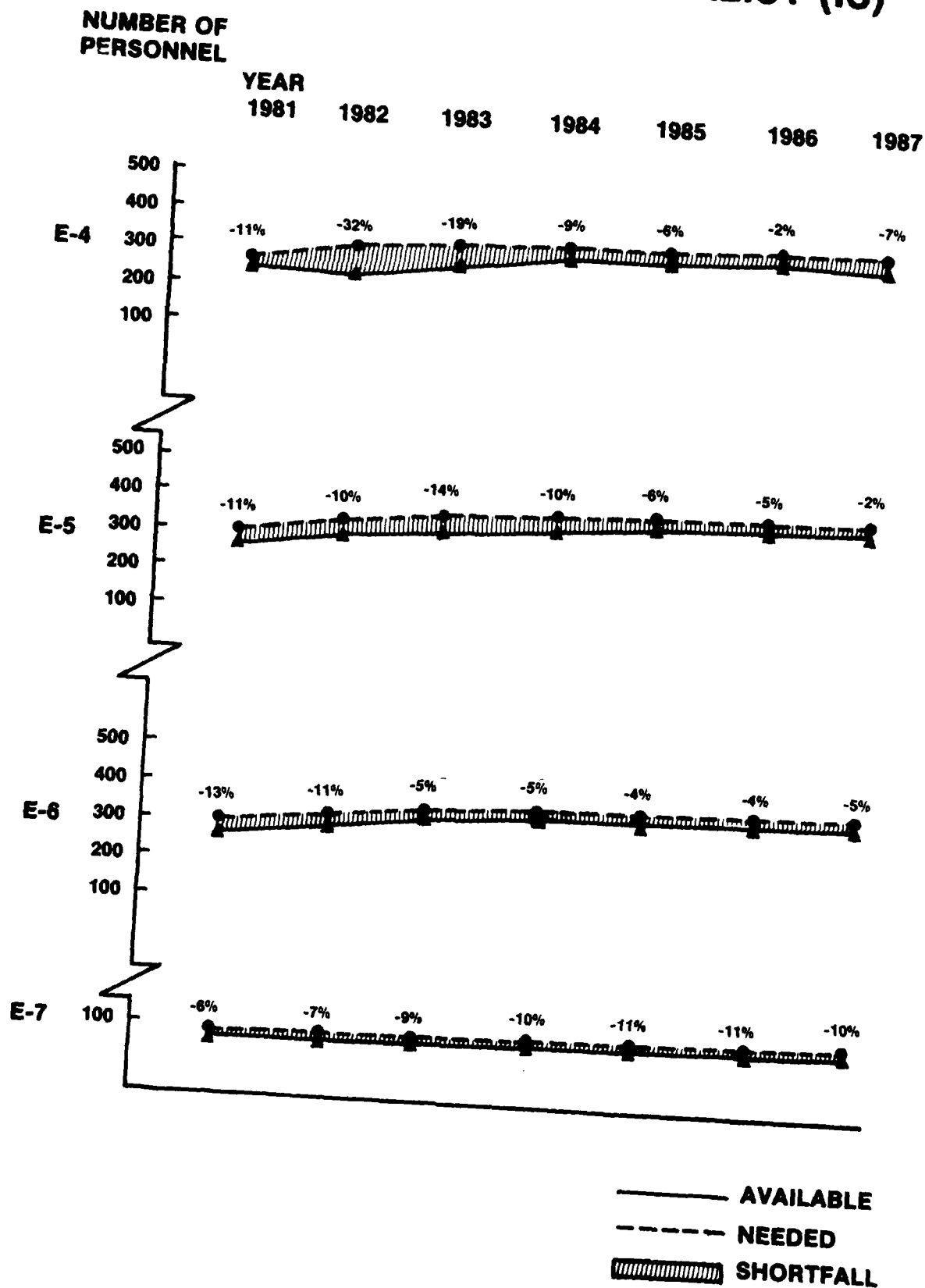
Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	299	369	379	380	331	302	322
	.92	1.05	1.05	1.14	1.37	1.53	1.63
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E-4	236	204	258	290	299	315	300
	2.51	2.01	2.10	2.17	2.15	2.25	2.36
	266	302	319	319	319	322	322
	-11.28	-32.45	-19.12	-9.09	-6.27	-2.17	-6.83
E-5	257	294	298	318	343	346	356
	4.74	4.47	4.23	4.26	4.36	4.51	4.79
	290	325	345	353	365	365	365
	-11.38	-9.54	-13.62	-9.92	-6.03	-5.21	-2.47
E-6	249	267	296	300	304	306	304
	11.93	11.75	11.50	11.48	11.88	12.39	12.86
	285	300	310	316	318	320	320
	-12.63	-11.00	-4.52	-5.06	-4.40	-4.37	-5.00
E-7	77	79	80	80	80	80	81
	15.98	16.26	16.00	16.04	16.07	16.14	16.12
	82	85	88	89	90	90	90
	-6.10	-7.06	-9.09	-10.11	-11.11	-11.11	-10.00
E-8	28	28	28	28	28	28	29
	19.00	19.71	20.00	20.82	21.32	20.96	20.95
	33	33	33	33	33	33	33
	-15.15	-15.15	-15.15	-15.15	-15.15	-15.15	-12.12
E-9	11	12	13	13	13	13	13
	21.95	21.92	-22.50	22.12	23.04	23.58	23.27
	14	15	15	15	15	15	15
	-21.43	-20.00	-13.33	-13.33	-13.33	-13.33	-13.33
E-4/9	858	884	973	1029	1067	1088	1083
	7.91	7.88	7.54	7.37	7.43	7.58	7.88
	970	1060	1110	1125	1140	1145	1145
	-11.55	-16.60	-12.34	-8.53	-6.40	-4.98	-5.41
Total	1157	1253	1352	1409	1398	1390	1405
	6.10	5.87	5.72	5.69	6.00	6.27	6.45
	1175	1280	1335	1350	1365	1370	1370
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 257
Means LOS 4.74
Manpower Requirements 290
End Strength Status -11.38

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

INTELLIGENCE SPECIALIST (IS)



MACHINERY REPAIRMAN (MR)

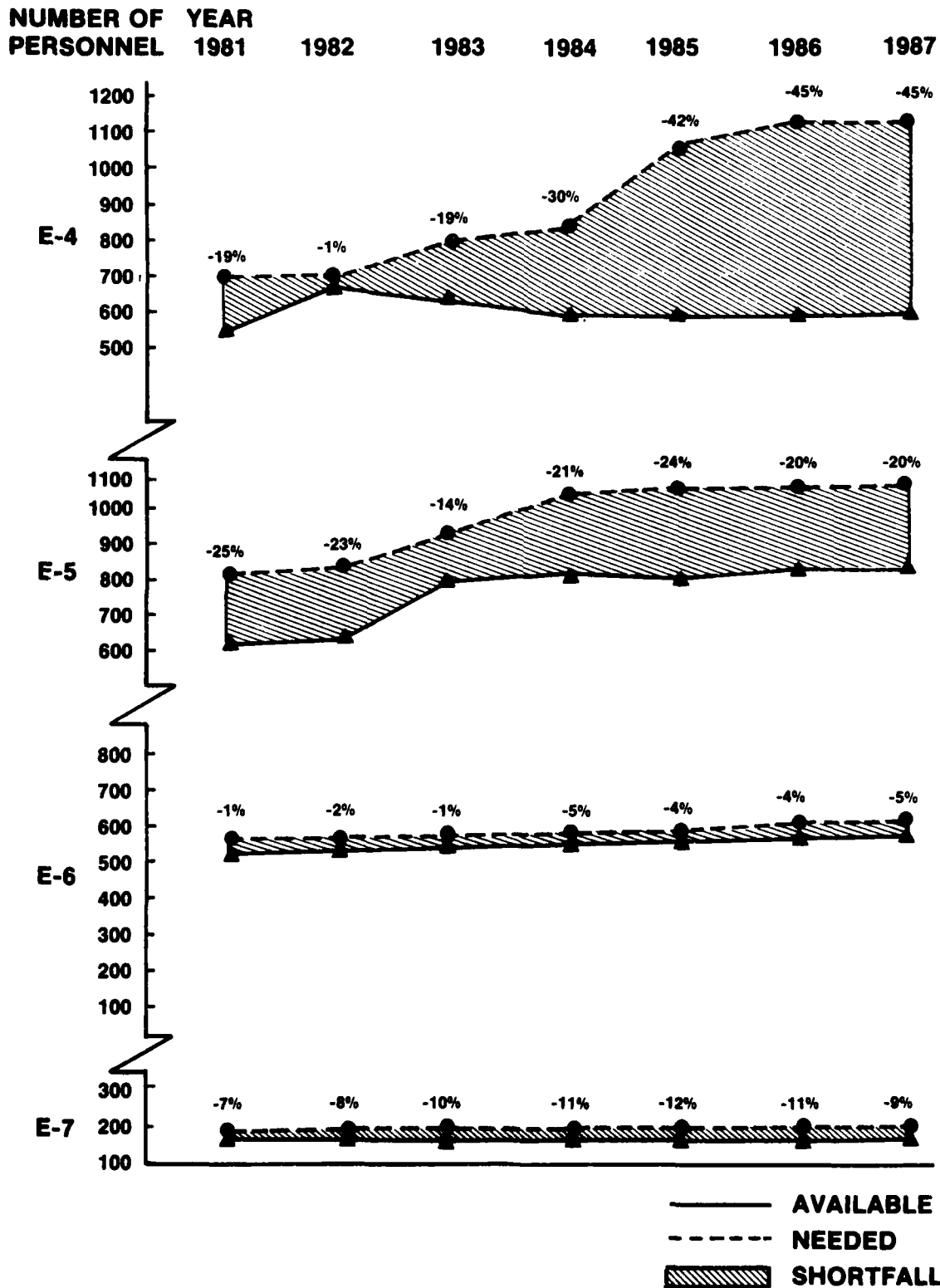
Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1542	1474	1511	1541	1590	1555	1494
	1.37	1.40	1.50	1.74	1.90	2.21	2.55
	---	---	---	---	---	---	---
	---	---	---	---	---	---	---
E-4	593	725	679	605	625	616	620
	3.12	2.94	3.02	2.95	2.99	3.05	3.03
	733	735	835	860	1080	1125	1125
	-19.10	-1.36	-18.68	-29.65	-42.13	-45.24	-44.89
E-5	642	681	821	840	823	863	867
	5.50	5.53	5.29	5.50	5.63	5.80	6.07
	855	880	950	1060	1080	1080	1080
	-24.91	-22.61	-13.58	-20.75	-23.80	-20.09	-19.72
E-6	537	536	566	556	561	564	560
	11.59	11.87	12.02	12.26	12.29	12.81	12.92
	545	548	570	585	585	590	590
	-1.47	-2.19	-.70	-4.96	-4.10	-4.41	-5.08
E-7	185	183	181	183	184	187	191
	16.53	16.54	16.63	16.70	16.65	16.65	16.58
	198	198	200	205	208	210	210
	-6.57	-7.58	-9.50	-10.73	-11.54	-10.95	-9.05
E-8	43	42	43	43	43	43	44
	19.41	19.90	20.27	20.97	21.03	21.52	21.84
	50	50	50	50	50	50	50
	-14.00	-16.00	-14.00	-14.00	-14.00	-14.00	-12.00
E-9	15	16	17	17	18	19	19
	23.97	24.31	24.85	25.56	26.00	26.34	26.82
	19	19	20	20	20	20	20
	-21.05	-15.79	-15.00	-15.00	-10.00	-5.00	-5.00
E-4/9	2015	2183	2307	2244	2254	2292	2301
	7.87	7.56	7.59	7.85	7.91	8.14	8.26
	2400	2430	2625	2780	3023	3075	3075
	-16.04	-10.16	-12.11	-19.28	-25.44	-25.46	-25.17
Total	3557	3657	3818	3785	3844	3847	3795
	5.05	5.08	5.18	5.36	5.42	5.74	6.01
	2640	2680	2890	3065	3333	3395	3395
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength 642
Means LOS 5.50
Manpower Requirements 855
End Strength Status -24.91

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

MACHINERY REPAIRMAN (MR)



MACHINIST'S MATE (MM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	11336		11098	11031	11363	11102	10488
	1.54	1.65	1.76	1.93	2.05	2.25	2.49
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	---	---	---	---	---	---	---
E-4	7564	8744	9861	10382	10529	10738	10784
	2.77	2.57	2.68	2.85	3.00	3.14	3.29
	8540	8830	9025	9204	9388	9438	9438
	-11.43	-.97	9.26	12.80	12.15	13.77	14.26
E-5	6243	6650	6670	6546	6772	6706	6736
	4.78	4.98	4.94	4.89	4.82	4.86	4.85
	5835	6035	6170	6270	6395	6400	6400
	6.99	10.19	8.10	4.40	5.90	4.78	5.25
E-6	3504	3558	3767	4010	4161	4303	4413
	9.03	8.69	8.50	8.57	8.73	8.81	8.97
	5150	5335	5450	5490	5525	5535	5535
	-31.96	-33.31	-30.88	-26.96	-24.69	-22.26	-20.27
E-7	1851	1881	1880	1872	1873	1889	1923
	14.56	14.56	14.34	14.29	14.26	14.26	14.39
	1975	2035	2070	2090	2110	2120	2120
	-6.28	-7.57	-9.18	-10.43	-11.23	-10.90	-9.29
E-8	657	683	701	708	711	721	730
	18.79	18.83	18.77	18.93	19.02	18.74	18.63
	770	805	820	830	835	835	835
	-14.68	-15.16	-14.51	-14.70	-14.85	-13.65	-12.57
E-9	284	295	312	317	325	325	332
	21.66	21.77	21.80	22.02	22.10	22.02	21.91
	360	360	365	366	372	372	372
	-21.11	-18.06	-14.52	-13.39	-12.63	-12.63	-10.75
E-4/9	20103	21811	23191	23835	24371	24682	24918
	6.37	6.11	5.97	6.00	6.07	6.14	6.27
	22630	23400	23400	24250	24625	24700	24700
	-11.17	-6.79	-2.97	-1.71	-1.03	-.07	.88
Total	31439	32788	34289	34866	35734	35784	35406
	4.63	4.62	4.61	4.71	4.79	4.94	5.15
	24380	25305	25960	26470	26903	27000	27000

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 6243

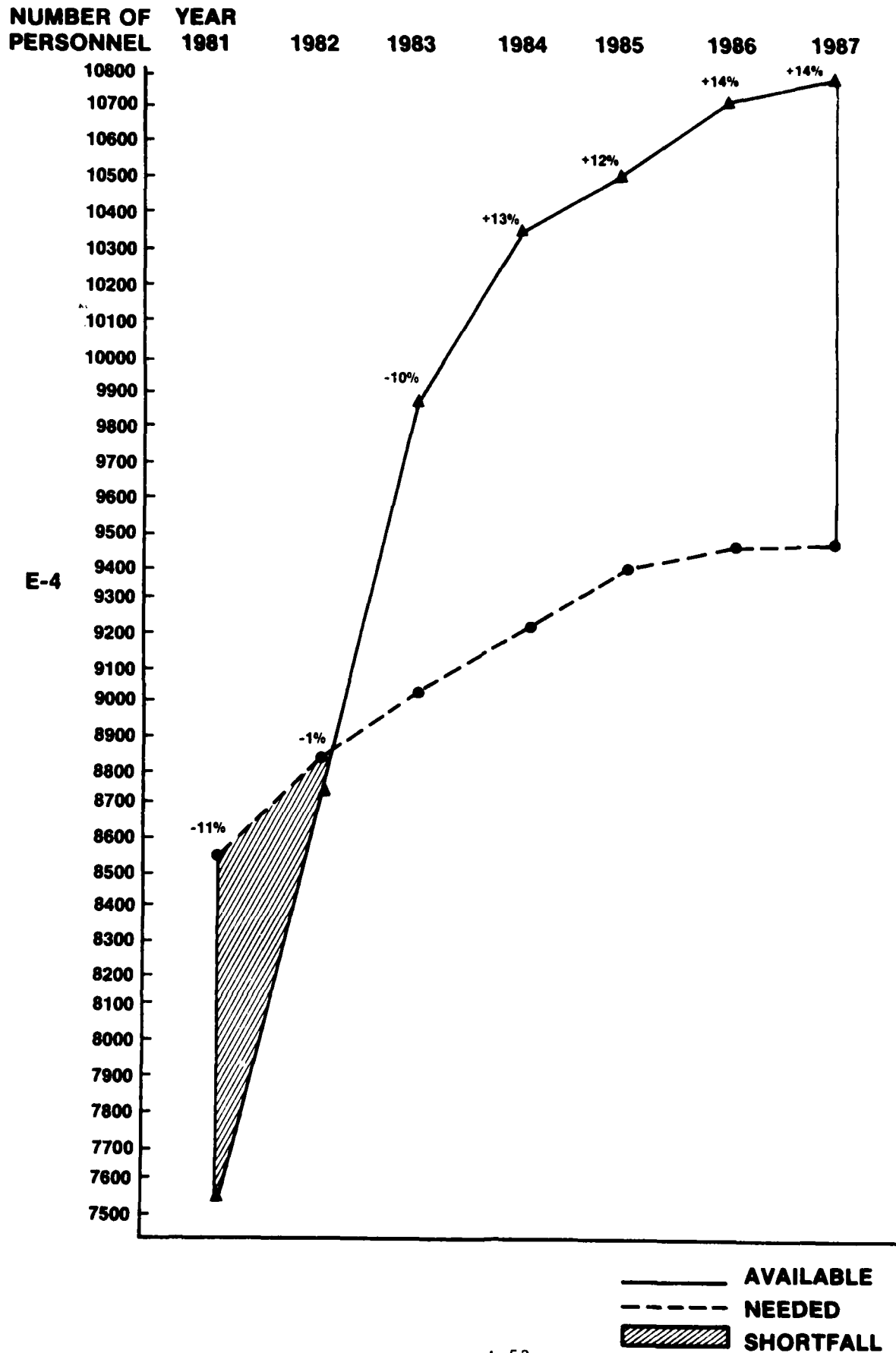
Means LOS 4.78

Manpower Requirements 5835

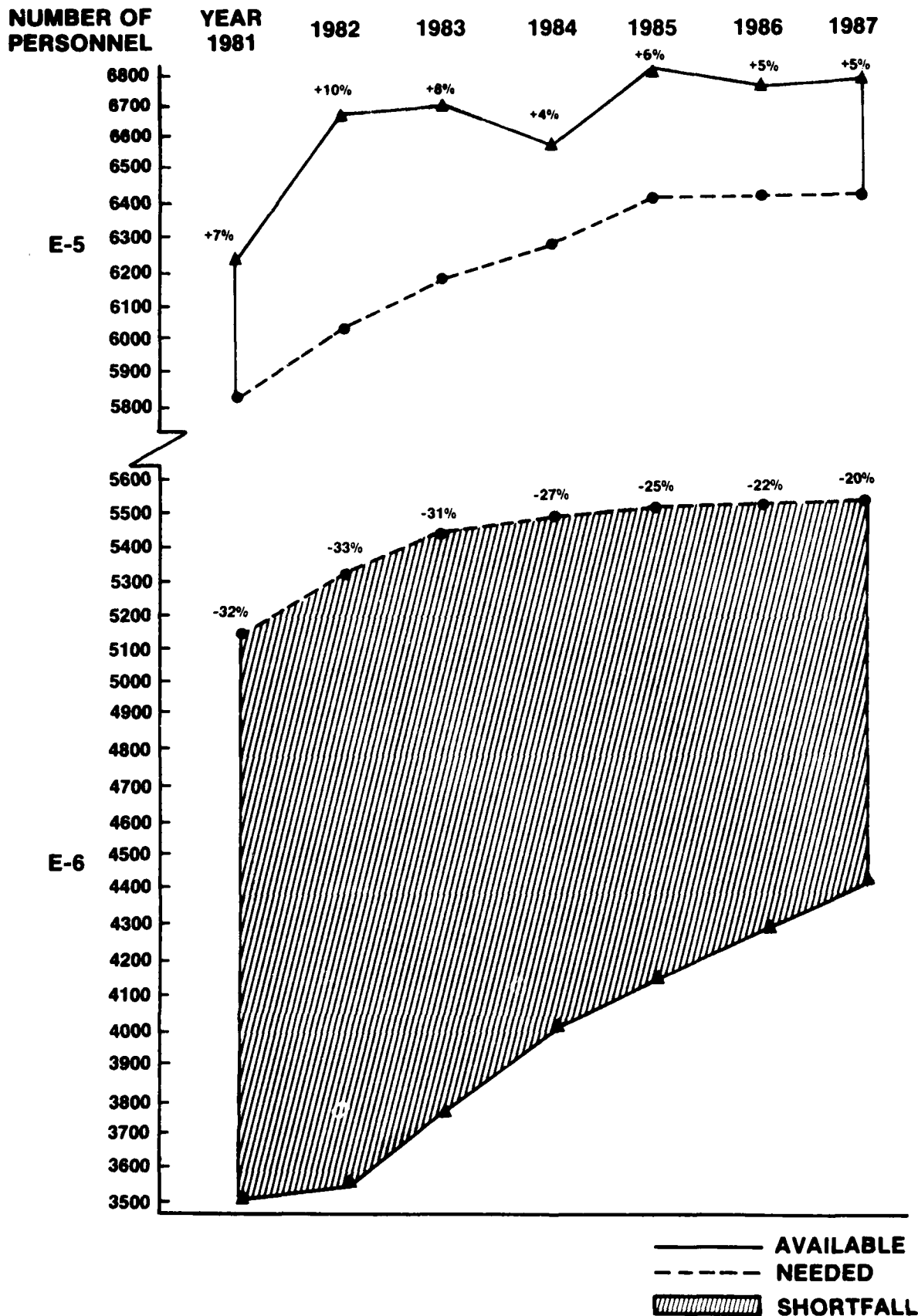
End Strength Status 6.99

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

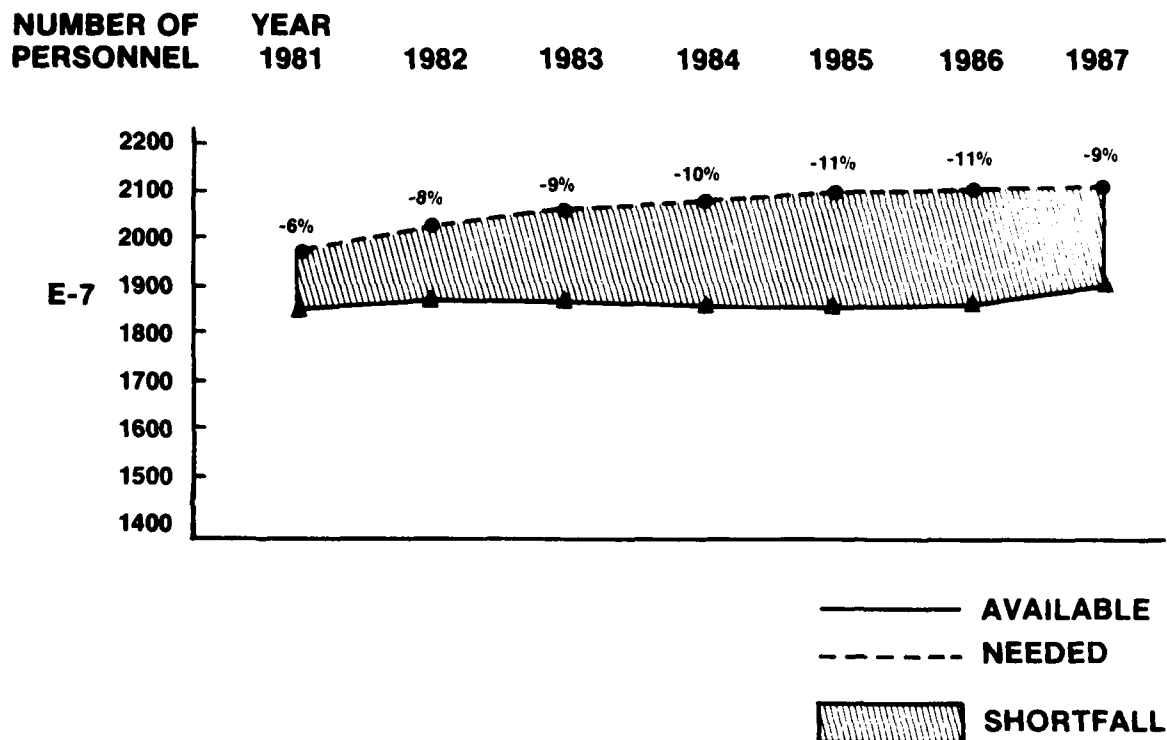
MACHINIST'S MATE (MM)



MACHINIST'S MATE (MM) (CONTINUED)



MACHINIST'S MATE (MM) (CONTINUED)



OCEAN SYSTEMS TECHNICIAN (OT)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	525 1.06 --- ---	592 1.13 --- ---	557 1.26 --- ---	543 1.34 --- ---	546 1.34 --- ---	553 1.39 --- ---	562 1.35 --- ---
E-4	283 2.72 337 -16.02	286 2.60 343 -16.62	318 2.53 355 -10.42	345 2.74 386 -10.62	302 2.77 403 -25.06	279 2.65 403 -30.77	294 2.70 403 -27.05
E-5	292 5.04 380 -23.16	353 4.69 430 -17.91	393 4.52 465 -15.48	432 4.62 480 -10.00	447 4.57 490 -8.78	460 4.82 490 -6.12	478 5.09 490 -2.45
E-6	368 11.45 375 -1.87	391 12.01 400 -2.25	421 12.23 425 -.94	413 12.63 435 -5.06	422 12.25 440 -4.09	421 13.00 440 -4.32	418 13.52 440 -5.00
E-7	117 16.65 126 -7.14	118 17.27 128 -7.81	119 17.65 131 -9.16	125 17.96 140 -10.71	137 17.77 155 -11.61	142 18.04 160 -11.25	146 17.98 160 -8.75
E-8	37 19.85 38 -2.63	36 20.61 38 -5.26	35 21.41 38 -7.89	36 22.06 38 -5.26	39 22.68 40 -2.50	40 23.42 40 0	40 23.70 40 0
E-9	15 22.10 19 -21.05	17 21.97 21 -19.05	18 23.22 21 -14.29	18 24.11 21 -14.29	19 24.82 22 -13.64	20 25.55 22 -9.09	20 26.25 22 -9.09
E-4/9	1112 8.51 1275 -12.78	1201 8.54 1360 -11.69	1304 8.43 1435 -9.13	1369 8.50 1500 -8.73	1366 8.6 1550 -11.87	1362 9.13 1555 -12.41	1396 9.29 1555 -10.23
Total	1637 6.12 1460 ---	1793 6.09 1567 ---	1861 6.29 1670 ---	1912 6.46 1750 ---	1912 6.58 1820 ---	1915 6.90 1825 ---	1958 7.01 1825 ---

Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 292

Means LOS 5.04

Manpower Requirements 380

End Strength Status -23.16

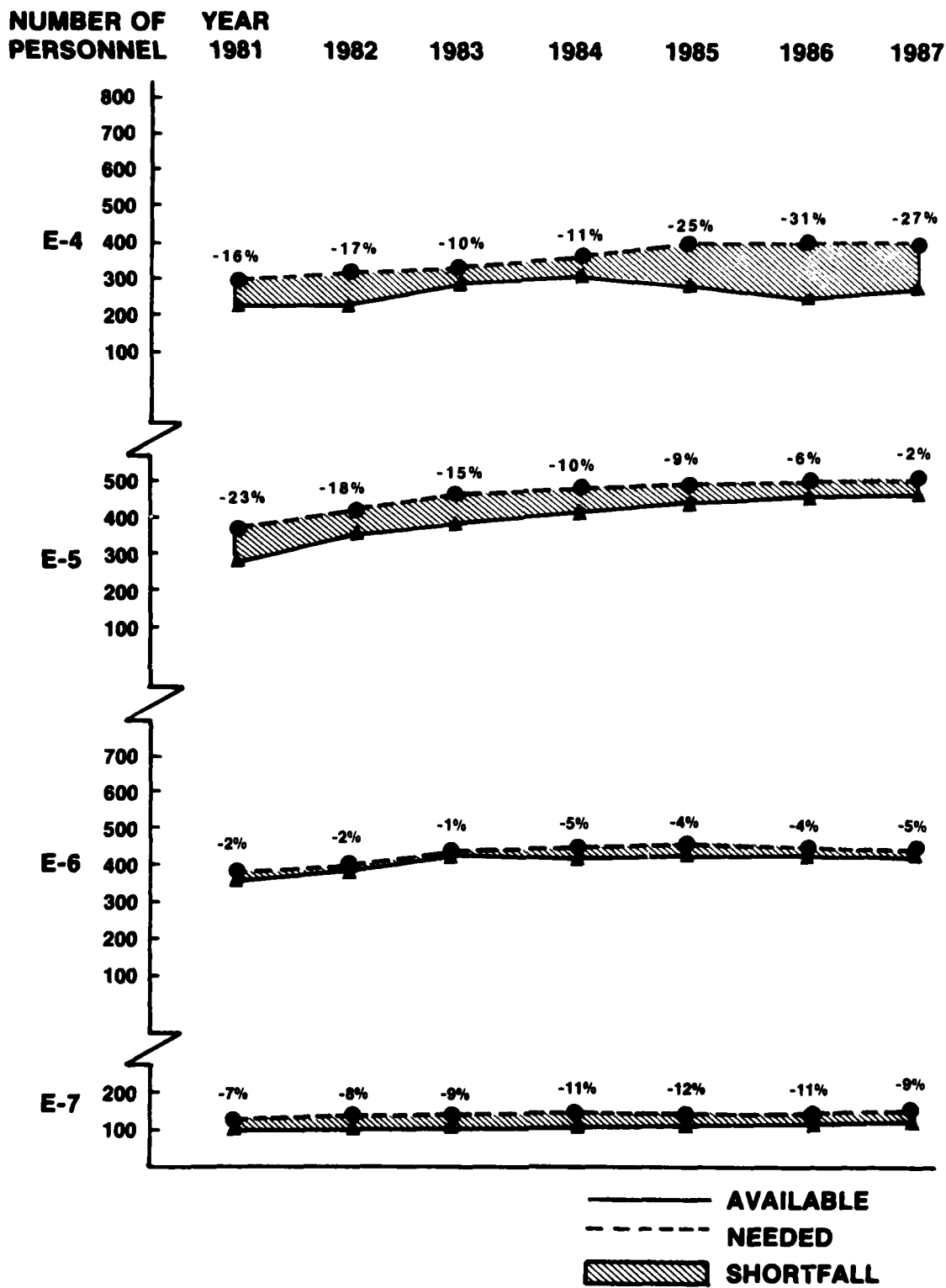
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

OCEAN SYSTEMS TECHNICIAN (OT)



OPERATIONS SPECIALIST (OS)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	4550	5808	5907	5315	4713	4298	4868
	1.14	1.22	1.39	1.57	1.68	1.77	1.64
	---	---	---	---	---	---	---
	---	---	---	---	---	---	---
E-4	1708	1669	2316	2727	2562	2209	1988
	2.95	2.68	2.58	2.78	2.88	2.93	2.92
	2349	2545	2865	2875	3053	3135	3135
	-27.29	-34.42	-19.16	-5.15	-16.08	-29.54	-36.59
E-5	1627	1738	1795	2241	2548	2595	2450
	5.38	5.20	4.97	4.58	4.52	4.71	4.96
	2170	2290	2450	2565	2700	2725	2725
	-25.02	-24.10	-26.73	-12.63	-5.74	-4.77	-10.09
E-6	936	987	1038	1095	1152	1218	1333
	10.31	9.88	9.73	9.81	9.99	10.11	10.24
	1715	1760	1875	1945	2000	2025	2025
	-45.42	-43.92	-44.64	-43.70	-42.40	-39.85	-34.17
E-7	567	587	622	636	653	659	671
	16.31	16.04	15.69	15.40	15.30	15.46	15.67
	605	635	685	710	735	750	740
	-6.28	-7.56	-9.20	-10.42	-11.16	-10.95	-9.32
E-8	191	195	199	200	203	207	210
	20.31	20.48	20.85	21.21	21.50	21.46	21.64
	224	230	233	235	238	240	240
	-14.73	-15.22	-14.59	-14.89	-14.71	-13.75	-12.50
E-9	49	53	57	61	65	65	67
	23.54	23.37	23.68	23.86	24.05	23.99	23.98
	62	65	67	70	74	75	75
	-20.97	-18.46	-14.93	-12.86	-12.16	-13.33	-10.67
E-4/9	5078	5229	6027	6960	7180	6953	6719
	7.43	7.25	6.68	6.33	6.45	6.79	7.19
	7125	7525	8175	8400	8800	8940	8940
	-28.73	-30.51	-26.28	-17.14	-18.41	-22.23	-24.84
Total	9628	11037	11934	12275	11893	11251	11587
	4.46	4.08	4.06	4.27	4.56	4.87	4.86
	9650	10265	11325	11650	12150	12315	12315
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 1627

Means LOS 5.38

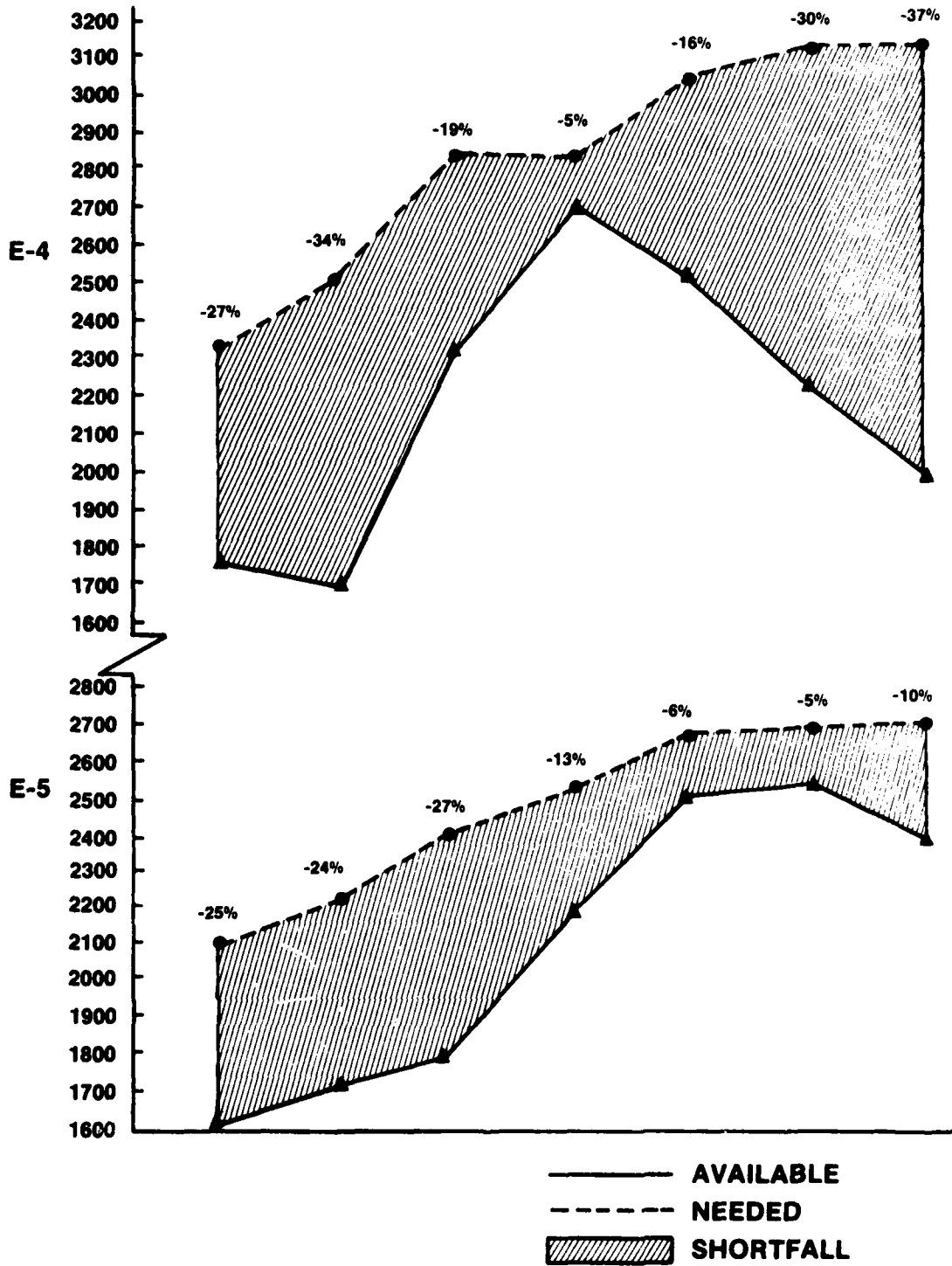
Manpower Requirements 2170

End Strength Status -25.02

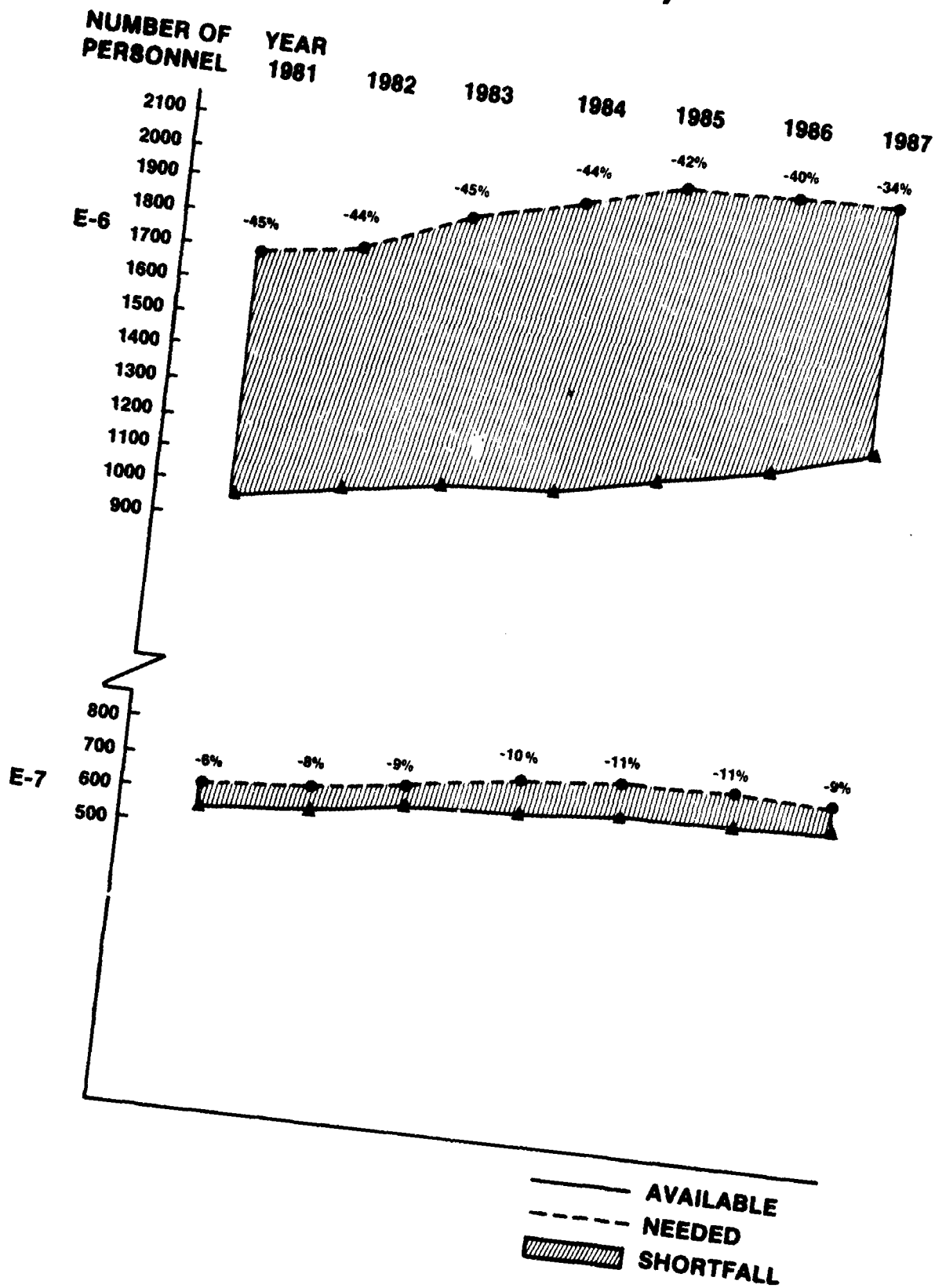
(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

OPERATIONS SPECIALIST (OS)

NUMBER OF PERSONNEL	YEAR						
	1981	1982	1983	1984	1985	1986	1987



OPERATIONS SPECIALIST (OS) (CONTINUED)



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OPTICALMAN (OM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	127	162	168	172	156	154	139
	1.16	1.15	1.20	1.28	1.47	1.60	1.36
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	---	---	---	---	---	---	---
E-4	47	54	73	74	83	68	67
	2.80	2.70	2.62	2.57	2.70	2.66	2.77
	105	105	110	134	129	129	129
	-55.24	-48.57	-33.64	-44.78	-35.66	-47.29	-48.06
E-5	69	73	68	78	79	89	83
	5.15	5.09	4.72	4.38	4.35	4.32	4.44
	98	101	107	120	120	120	120
	-29.59	-27.72	-36.45	-35.00	-34.17	-25.83	-30.83
E-6	95	97	106	107	106	106	108
	11.75	12.40	12.30	12.29	12.39	12.63	12.98
	96	99	112	115	120	120	120
	-1.04	-2.02	-5.36	-6.96	-11.67	-11.67	-10.00
E-7	35	36	36	36	35	36	36
	17.24	17.75	17.64	18.11	18.59	18.50	18.75
	37	39	40	40	40	40	40
	-5.41	-7.69	-10.00	-10.00	-12.50	-10.00	-10.00
E-8	9	9	9	9	9	9	10
	20.50	21.06	21.61	22.06	22.50	21.50	21.20
	11	11	11	11	11	11	11
	-18.18	-18.18	-18.18	-18.18	-18.18	-18.18	-9.09
E-9	2	2	3	3	3	3	3
	24.00	25.00	23.83	24.83	25.83	26.50	23.50
	3	3	3	3	3	3	3
	-33.33	-33.33	0	0	0	0	0
E-4/9	257	271	295	307	315	311	307
	9.50	9.59	9.21	9.03	8.93	9.14	9.49
	350	358	383	423	423	423	423
	-26.57	-24.30	-22.98	-27.42	-25.53	-26.48	-27.42
Total	384	433	463	479	471	465	446
	6.74	6.43	6.31	6.25	6.46	6.65	6.96
	374	383	411	453	453	453	453
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 69

Means LOS 5.15

Manpower Requirements 98

End Strength Status -29.59

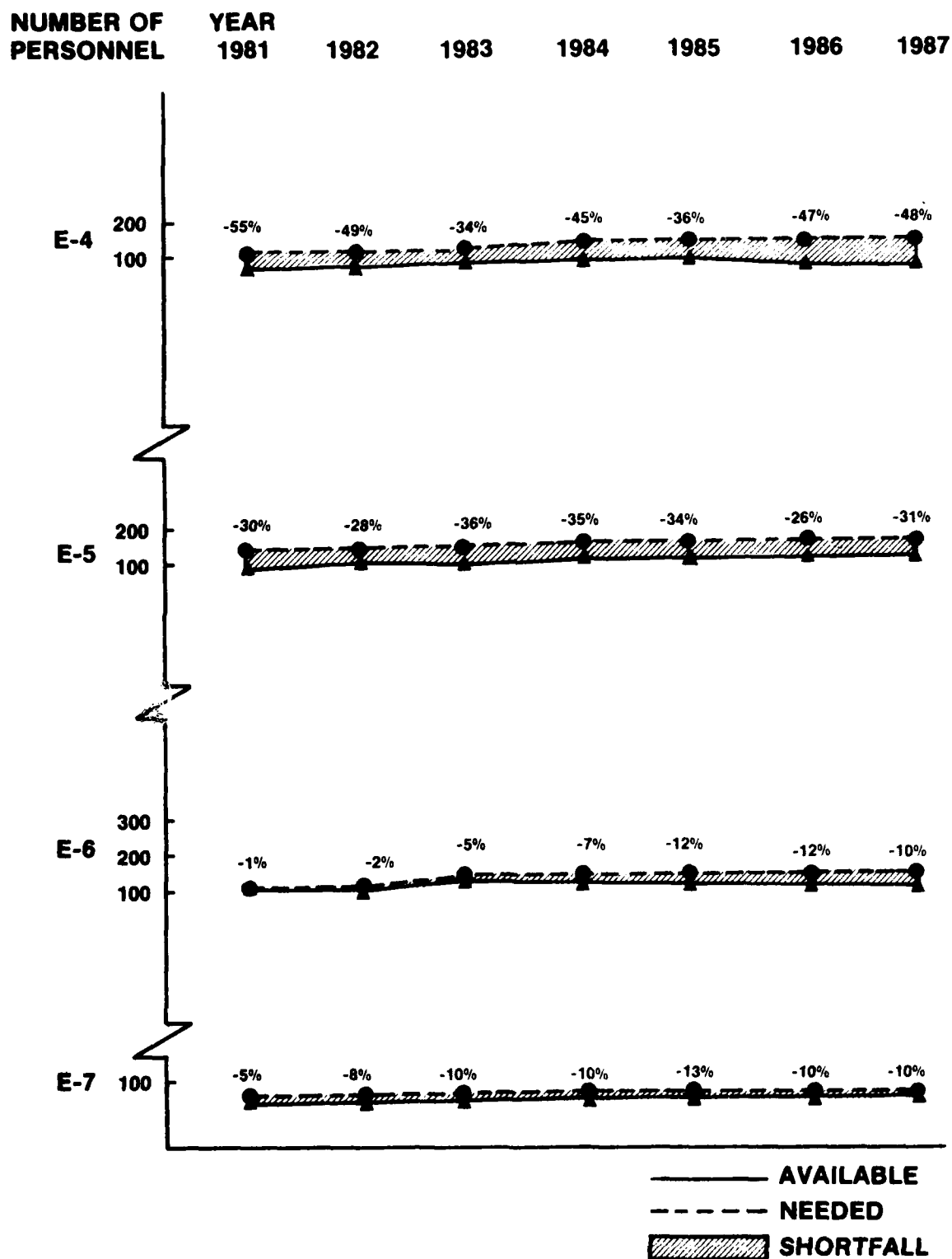
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

OPTICALMAN (OM)



QUARTERMASTER (QM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1089	1847	1963	2004	2081	2058	1942
	1.45	1.47	1.62	1.78	1.88	2.12	2.44
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E-4	951	903	872	854	893	877	877
	3.03	3.03	2.99	3.06	3.09	3.14	3.06
	1086	1183	1372	1437	1531	1555	1555
	-12.43	-23.67	-36.44	-40.57	-41.67	-43.60	-43.60
E-5	876	944	994	983	951	948	949
	5.38	5.17	5.10	5.02	5.13	5.14	5.16
	845	885	930	935	950	965	965
	3.67	6.67	6.88	5.13	.11	-1.76	-1.66
E-6	486	454	453	507	529	534	537
	9.94	9.35	8.67	8.71	8.74	8.83	9.04
	910	915	945	965	965	965	965
	-46.59	-50.38	-52.06	-47.46	-45.18	-44.66	-44.35
E-7	582	598	600	596	594	601	613
	16.44	15.97	15.56	15.65	15.47	15.30	15.24
	622	647	660	665	670	675	675
	-6.43	-7.57	-9.09	-10.38	-11.34	-10.96	-9.19
E-8	97	104	124	128	136	142	144
	20.92	21.35	20.95	21.11	21.29	21.28	21.76
	117	123	145	150	160	165	165
	-17.09	-15.45	-14.48	-14.67	-15.00	-13.94	-12.73
E-9	38	39	41	42	43	44	45
	23.76	24.42	24.52	25.00	25.31	25.68	24.59
	45	47	48	48	49	50	50
	-15.56	-17.02	-14.58	-12.50	-12.24	-12.00	-10.00
E-4/9	3030	3042	3084	3110	3146	3146	3165
	8.23	8.08	7.96	8.05	8.09	8.16	8.22
	3625	3800	4100	4200	4325	4375	4375
	-16.41	-19.95	-24.78	-25.95	-27.26	-28.09	-27.66
Total	4839	4889	5047	5114	5227	5204	5107
	5.69	5.59	5.50	5.59	5.61	5.77	6.02
	4050	4230	4545	4650	4785	4845	4845
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 876

Means LOS 5.38

Manpower Requirements 845

End Strength Status +3.67

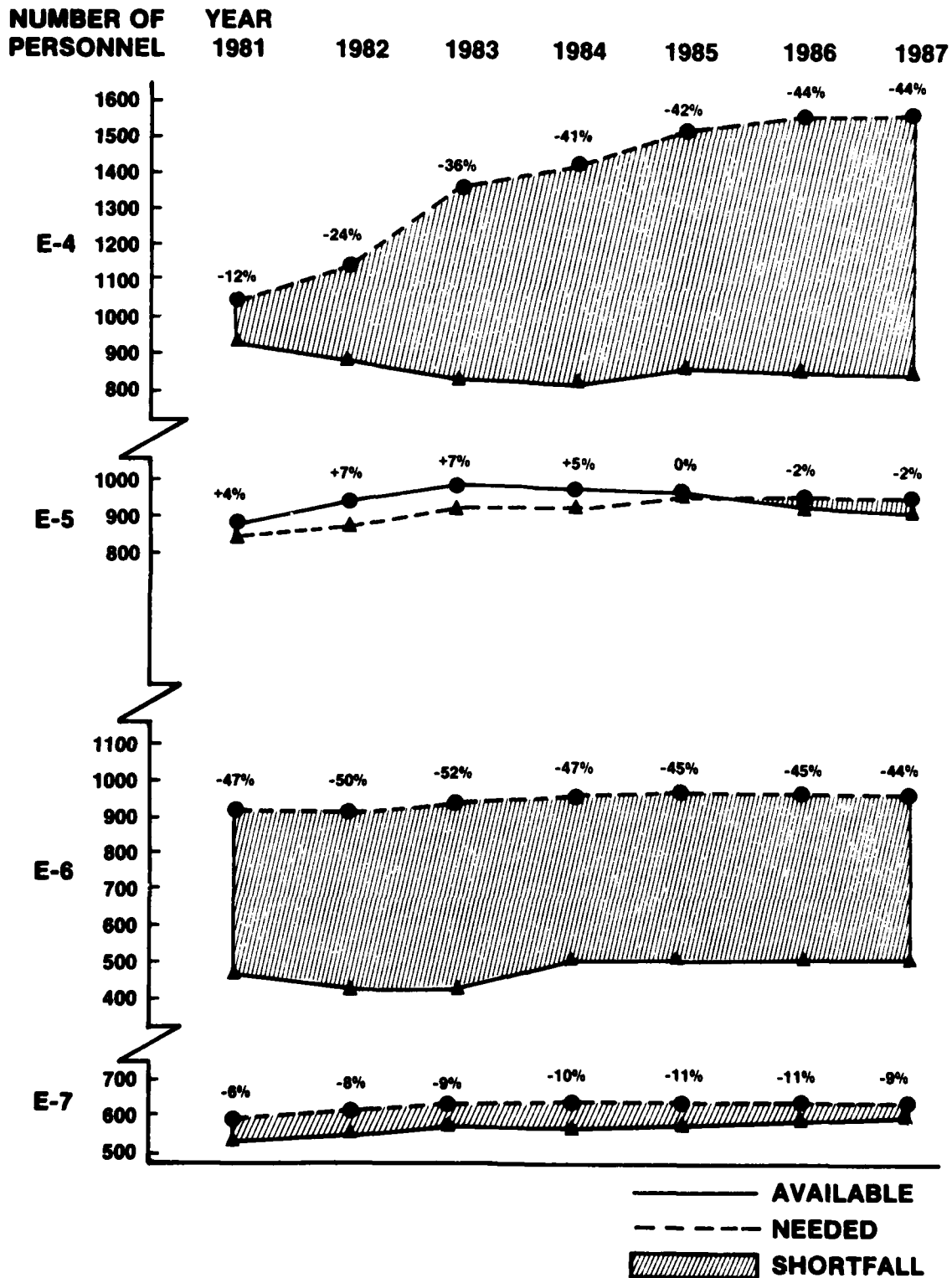
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

QUARTERMASTER (QM)



SONAR TECHNICIAN (SURFACE) (STG)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1116	1106	1224	1272	1305	1348	1219
	1.75	1.54	1.72	1.88	2.07	2.36	2.87
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E-4	1331	1254	1095	1094	1114	1124	1120
	2.45	2.42	2.27	2.27	2.33	2.31	2.29
	1158	1225	1365	1445	1530	1570	1570
	14.94	2.37	-19.78	-24.29	-27.19	-28.41	-28.66
E-5	1364	1443	1512	1433	1410	1450	1462
	4.53	4.63	4.55	4.47	4.43	4.45	4.43
	1190	1250	1395	1450	1500	1535	1535
	14.62	15.44	8.39	-1.17	-6.00	-5.54	-4.76
E-6	580	614	646	704	720	720	726
	9.25	8.43	7.52	7.44	7.66	7.62	7.71
	1000	1040	1115	1140	1180	1190	1190
	-42.00	-40.96	-42.06	-38.25	-38.98	-39.50	-38.99
E-7	344	356	386	385	399	414	422
	15.42	15.49	15.29	14.82	14.25	13.68	13.70
	368	385	425	430	450	465	465
	-6.52	-7.53	-9.18	-10.47	-11.33	-10.97	-9.25
E-8	104	109	115	115	119	121	122
	18.74	19.03	19.21	19.92	20.37	20.29	20.31
	129	130	135	135	140	140	140
	-19.38	-16.15	-14.81	-14.81	-15.00	-13.57	-12.86
E-9	25	21	21	21	22	22	23
	23.70	23.50	24.02	24.02	24.59	24.36	24.33
	24	24	24	24	25	25	25
	4.17	-12.50	-12.50	-12.50	-12.00	-12.00	-8.00
E-4/9	3748	3797	3752	3752	3784	3851	3875
	6.04	6.05	6.03	6.03	6.08	6.02	6.05
	3869	4054	4624	4624	4825	4925	4925
	-3.13	-6.34	-18.86	-18.86	-21.58	-21.81	-21.32
Total	4864	4903	5024	5024	5089	5199	5094
	5.06	5.03	4.98	4.98	5.05	5.07	5.29
	4659	4879	5574	5574	5825	5925	5925
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 1364

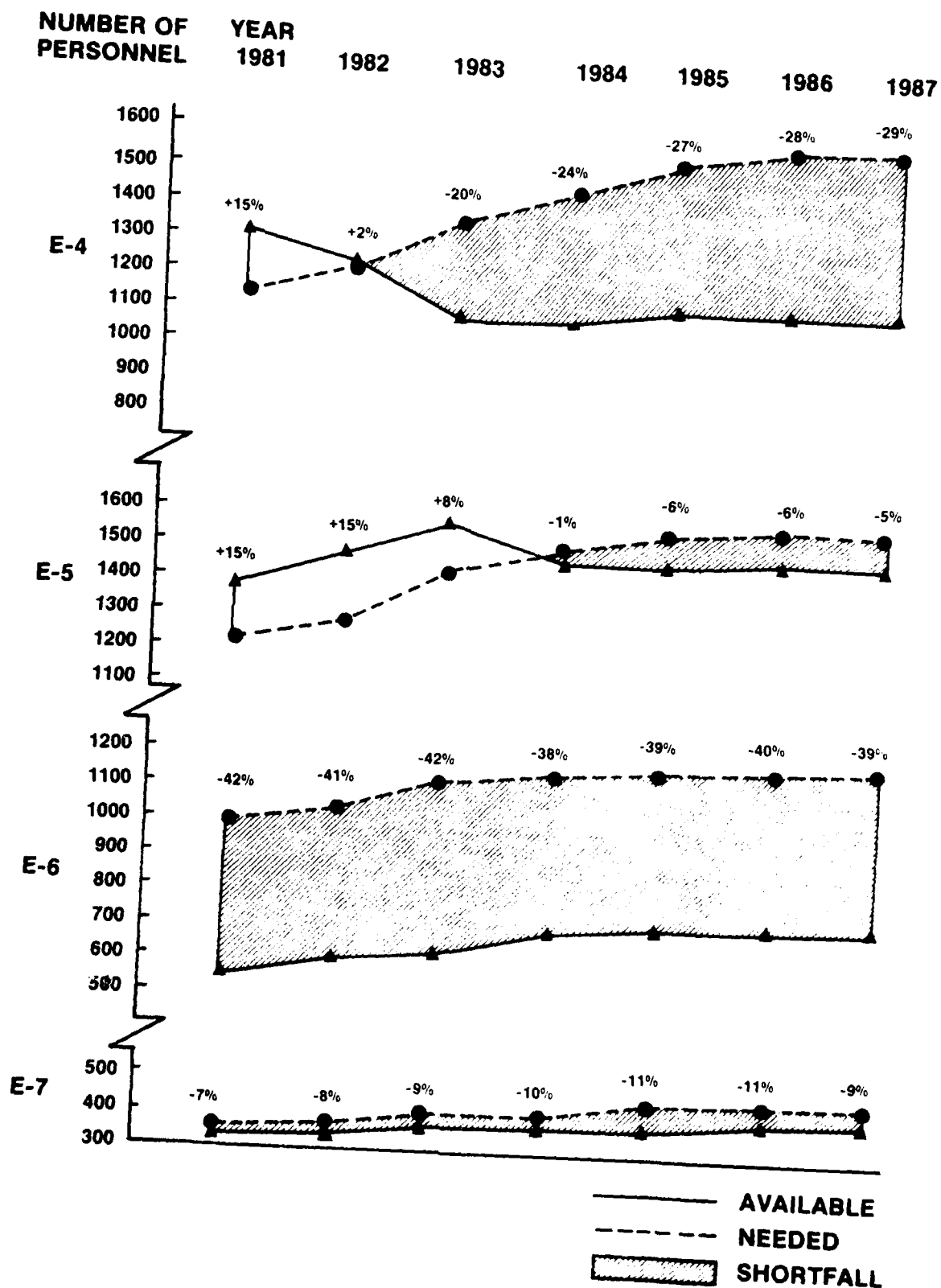
Means LOS 4.53

Manpower Requirements 1190

End Strength Status +14.62

(Projected No. of men at end of FY)
(Average Length of Service)
(CNO estimates of number required)
(Percentage over or under requirements)

SONAR TECHNICIAN (SURFACE) (STG)



SONAR TECHNICIAN (SUBMARINE) (STS)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1003	942	751	833	868	895	899
	1.96	2.35	2.51	2.92	3.28	3.77	4.06
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E-4	899	829	923	904	900	921	926
	2.66	2.40	2.15	2.17	2.17	2.21	2.26
	662	722	803	802	803	810	810
	35.80	14.82	14.94	12.72	12.08	13.70	14.32
E-5	672	724	771	702	725	731	752
	4.78	4.71	4.77	4.67	4.51	4.57	4.51
	674	720	760	770	770	770	770
	-.30	.56	1.45	-8.83	-5.84	-5.06	-2.34
E-6	493	519	540	624	648	671	658
	7.60	7.62	7.56	7.77	8.15	8.22	8.28
	640	665	700	710	710	710	710
	-22.97	-21.95	-22.86	-12.11	-8.73	-5.49	-7.32
E-7	269	268	277	273	274	276	281
	14.09	14.06	13.57	13.66	13.82	13.70	13.52
	287	290	305	305	308	310	310
	-6.27	-7.59	-9.18	-10.49	-11.04	-10.97	-9.35
E-8	130	138	147	148	147	151	153
	18.38	18.49	18.65	18.83	19.11	18.80	18.55
	152	163	172	173	174	175	175
	-14.47	-15.34	-14.53	-14.45	-15.52	-13.71	-12.57
E-9	22	25	27	29	31	33	34
	21.18	21.98	22.72	23.43	24.11	24.68	25.18
	28	30	31	31	30	31	31
	-21.43	-16.67	-12.90	-6.45	3.33	6.45	9.68
E-4/9	2485	2503	2685	2680	2725	2783	2804
	6.44	6.48	6.28	6.45	6.55	6.59	6.57
	2443	2590	2771	2791	2795	2806	2806
	1.72	-3.36	-3.10	-3.98	-2.50	-.82	-.07
Total	3488	3445	3436	3513	3593	3678	3703
	5.15	5.35	5.46	5.61	5.76	5.90	5.96
	2823	2995	3196	3221	3230	3246	3246
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in FY81, the estimates are:

End Strength 672

Means LOS 4.78

Manpower Requirements 674

End Strength Status -.30

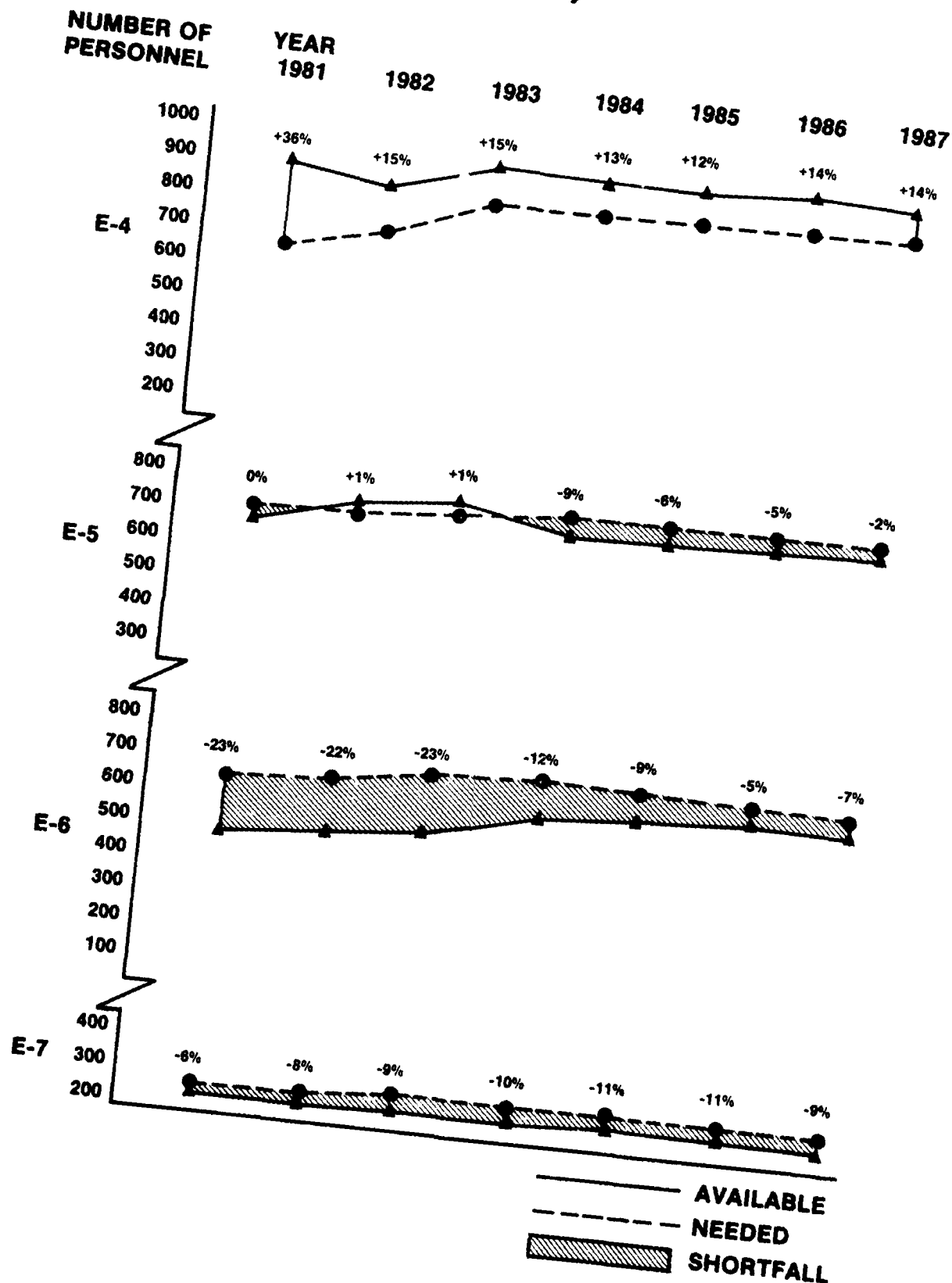
(Projected No. of men at end of FY)

(Average Length of Service)

(CNO estimates of number required)

(Percentage over or under requirements)

SONAR TECHNICIAN (SUBMARINE) (STS)



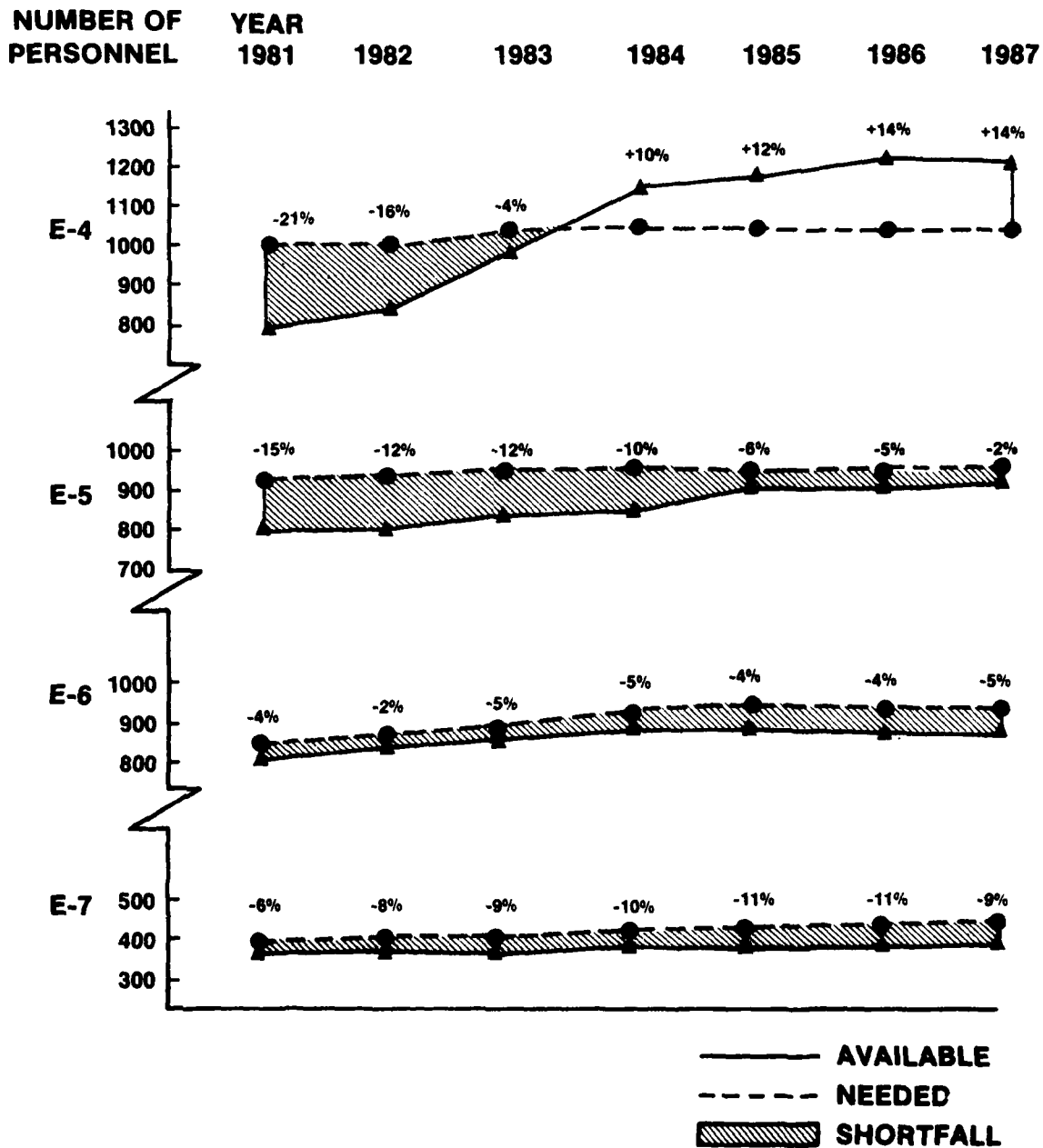
TORPEDOMAN'S MATE (TM)

Rate	FY81	FY82	FY83	FY84	FY85	FY86	FY87
E-1/3	1472	1596	1656	1642	.729	1796	1867
	1.41	1.42	1.57	1.72	1.97	2.18	2.50
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E-4	800	870	1019	1183	1195	1222	1227
	2.80	2.57	2.66	2.85	3.06	3.31	3.50
	1016	1034	1063	1078	1066	1074	1074
	-21.26	-15.86	-4.14	9.74	12.10	13.78	14.25
E-5	800	829	853	887	928	935	961
	5.22	5.08	4.93	4.90	4.97	5.23	5.41
	938	943	970	985	985	985	985
	-14.71	-12.09	-12.06	-9.95	-5.79	-5.08	-2.44
E-6	823	851	876	903	924	922	916
	11.34	10.56	9.92	10.02	10.21	10.43	10.74
	854	870	920	950	965	965	965
	-3.63	-2.18	-4.78	-4.95	-4.25	-4.46	-5.08
E-7	356	351	355	359	360	365	372
	17.44	17.27	16.80	16.46	16.22	15.97	15.88
	380	380	390	400	405	410	410
	-6.32	-7.63	-8.97	-10.25	-11.11	-10.98	-9.27
E-8	83	83	90	94	95	96	97
	19.81	19.69	19.58	19.74	19.75	19.36	19.29
	97	98	105	110	111	111	111
	-14.43	-15.31	-14.29	-14.55	-14.41	-13.51	-12.61
E-9	79	82	87	88	90	92	94
	23.87	24.24	24.41	24.88	24.83	23.88	23.88
	100	100	102	102	103	105	105
	-21.00	-18.00	-14.71	-13.73	-12.62	-12.38	-10.48
E-4/9	2941	3066	3280	3514	3592	3632	3667
	8.66	8.19	7.76	7.60	7.70	7.83	8.00
	3385	3425	3550	3625	3635	3650	3650
	-13.12	-10.48	-7.61	-3.06	-1.18	-.49	.47
Total	4413	4662	4936	5156	5321	5428	5534
	6.24	5.88	5.68	5.73	5.84	5.96	6.15
	3765	3820	3965	4055	4070	4090	4090
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Explanation: Within the cells for each rate and rating by fiscal year, the data are presented as follows; for example, for the E-5 in Fy81, the estimates are:

End Strength	800	(Projected No. of men at end of FY)
Means LOS	5.22	(Average Length of Service)
Manpower Requirements	938	(CNO estimates of number required)
End Strength Status	-14.71	(Percentage over or under requirements)

TORPEDOMAN'S MATE (TM)



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